



COMBAT

New Guinea 1942–44

Japanese Soldier

VERSUS

US Soldier

Gregg Adams



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Illustrated by Steve Noon

CONTENTS

INTRODUCTION	4
THE OPPOSING SIDES	10
Organization and history • Recruitment and training • Doctrine and firepower Leadership and communications • Logistics	
BUNA	32
November 18, 1942–January 3, 1943	
BIAK	45
June 15–July 20, 1944	
THE DRINIUMOR RIVER	59
July 10–August 4, 1944	
ANALYSIS	72
AFTERMATH	75
UNIT ORGANIZATIONS	78
BIBLIOGRAPHY	79
INDEX	80

Introduction

The New Guinea campaign was one of the toughest of World War II. New Guinea, the second largest island in the world, is located between the equator and 11° South latitude. It has a hot and humid climate along the coast with very heavy rainfall, while the inland mountains are frequently forest-covered and shrouded with heavy fogs. In 1942 the island had no substantial infrastructure; roads were few and far between, and there were no cities or rail lines. The indigenous people lived a lifestyle little removed from the Stone Age. There had been some gold prospecting before the war and potential oil fields were at the extreme western tip of the island.

New Guinea was not a battleground due to its natural resources, however, but because of the island's strategic location immediately north of Australia. The Imperial Japanese Army (IJA) did not believe it had the resources required to invade Australia as proposed by the Imperial Japanese Navy (IJN). Instead, the two services agreed a plan to sever the sea lanes between the United States and Australia. This plan called for capturing Port Moresby, on the southern coast of eastern New Guinea, occupying the eastern Solomon Islands, and seizing Fiji, Samoa, and New Caledonia in the South Pacific. A Japanese amphibious attack on Port Moresby was aborted after the Battle of the Coral Sea, fought on May 4–8, 1942, the first of four battles fought between Japanese and American aircraft carriers that year. On May 18, the IJA activated its 17th Army under Lieutenant General Hyakutake Harukichi and consisting of: the South Seas Detachment (reinforced 144th Infantry Regiment), assigned to capture New Caledonia; the Kawaguchi Detachment (reinforced 124th Infantry Regiment), part of the Yazawa Detachment (41st Infantry Regiment), assigned to attack Samoa; and the Aoba Detachment (reinforced 4th Infantry Regiment), assigned the mission of taking Port Moresby. These operations were to be carried out as soon as the IJN successfully completed its June 1942 Midway Island and Aleutian Islands expeditions, but the plan was put on



hold after the IJN's loss of four aircraft carriers at the Battle of Midway on June 4–7, 1942.

The Allies created the Southwest Pacific Area (SWPA) under General Douglas MacArthur to defend Australia and prepare for counteroffensives against the Japanese. MacArthur, and many senior Australian commanders, decided that the place to defend Australia was New Guinea, beginning with Port Moresby and Milne Bay at the easternmost end of the island. At first, SWPA's forces were primarily Australian ground forces, many of whom were militia, plus an Allied air force made up of Royal Australian Air Force (RAAF) and United States Army Air Forces (USAAF) units, and also a small Royal Australian Navy and US Navy force. American ground troops were initially two infantry divisions from the US Army National Guard.

Following the US Navy's victory at Midway, SWPA planned to use its limited resources to secure the Buna area on the coast north of Port Moresby and build airfields there. This would place Allied aircraft closer to the Japanese bases around Lae on New Guinea and Rabaul on New Britain Island. However, before the Allies could move, the advance guard of the

Japanese soldiers in the jungle of New Ireland, Papua New Guinea, in April 1942. Japanese forces landed and occupied Lae and Salamaua on the North coast of New Guinea on March 8, 1942. This propaganda photograph shows soldiers marching into Lae to commemorate the event. The landings at Lae and nearby Salamaua were unopposed on the ground. However, on March 10, a US Navy task force with the aircraft carriers USS *Lexington* and USS *Yorktown* sent 104 aircraft to attack the Japanese ships carrying and supporting the invasion force. (Mondadori via Getty Images)



Lieutenant General Walter Krueger, US Army, commander Sixth US Army and Alamo Force (at left) and Vice Admiral Thomas C. Kinkaid, US Navy, commander Seventh Fleet ("MacArthur's Navy"), pictured aboard a PT boat. Krueger was essentially General Douglas MacArthur's army commander during the 1944 New Guinea offensive. By creating Alamo Force directly under his control, MacArthur effectively bypassed his theater's Allied Land Forces commander, Australian General Sir Thomas A. Blamey. Blamey, recognizing the political realities of Allied command, did not object to this arrangement. (80-G-258490 courtesy of the Naval History and Heritage Command)

Japanese South Seas Detachment landed at Buna on July 22 and commenced an overland offensive across the Owen Stanley Mountains to capture Port Moresby. Fighting on New Guinea began in earnest.

The Allied campaign on New Guinea was initially an Australian action. It was not until after Australian troops had stopped the Japanese before Port Moresby, and at Milne Bay, that American ground troops joined the battle. One should note that Australia provided most of the ground forces fighting on New Guinea until 1944. The defensive actions of 1942, the Buna counteroffensive, and the campaign in 1943 were under an Australian headquarters, New Guinea Force (NGF), which carried out attacks with the Australian 3rd Division around Salamaua as a diversion to the main offensive, a combined amphibious and airborne attack to capture Lae. The Australian 9th Division conducted the amphibious portion while the Australian 7th Division was flown in to airfields secured by the US 503d Parachute Infantry Regiment (PIR). Australian forces defeated Japanese forces and drove them back toward Hansa Bay and Wewak. American forces served under NGF until late 1943. These included the troops involved in fighting at Buna profiled below.

In late 1943 American fighting units were commanded separately from NGF by the Sixth US Army under Lieutenant General Walter Krueger.



The nature of the fighting on New Guinea would come as a shock to many Americans. The IJA's determination to die rather than surrender was anathema to Western culture. Here, an American soldier stands over the bodies of Japanese attackers who attempted a suicidal charge during the final fighting on Buna Beach. The fighting at Buna would demonstrate that the IJA was a tough defensive opponent that literally fought to the last round and last man. American troops were disgusted when Japanese wounded killed Americans attempting to provide medical aid. Encounters with Japanese troops "playing dead" who then fired on Americans from behind made the Americans' animosity toward their enemy worse. In response, American troops took steps to ensure that any Japanese soldier they passed was confirmed as dead. The willingness of the Japanese soldier to commit suicide rather than be taken prisoner came as an unpleasant surprise. Evidence of cannibalism discovered in captured Japanese positions shocked American troops, who discovered their opponent had a very different attitude to war than their own; the war was a clash of cultures as much as it was a war of nations. (George Strock/The LIFE Picture Collection via Getty Images)

MacArthur designated the Sixth US Army as "Alamo Force," making it a task force directly under his command and bypassing the Allied Land Forces commander, General Sir Thomas A. Blamey, who retained command of Australian troops on New Guinea. This sleight-of-hand machination does not appear to have troubled Blamey or the Australian Government, even though it violated the command structure agreed to when SWPA was set up. (In September 1944 the Eighth US Army was activated in SWPA and it too reported directly to General MacArthur.) Alamo Force carried out a series of amphibious landings beginning in December 1943. Two landings were made on New Britain that month, another at Saidor (on New Guinea) in January 1944, and several in the Admiralty Islands during February and March 1944. From April through September 1944, Alamo Force carried out a series of six landings along the north coast of New Guinea or adjacent islands. Two of these landings resulted in actions at Aitape (or the Driniumor River) and on the island of Biak, both of which are studied below.

The struggle for New Guinea, January 1942–July 1944

MAP KEY

- 1 January 23, 1942:** The Japanese South Seas Detachment captures Rabaul, which would become its main base in the area.
- 2 July 22–September 16, 1942:** The South Seas Detachment lands at Buna. The Japanese advance toward Port Moresby along the Kokoda Track that crosses the Owen Stanley Mountains, fighting ill-supplied Australian forces. The Japanese are stopped near Ioribaiwa Ridge by Australian forces, now better supplied.
- 3 September 23, 1942:** Australian forces commence a counteroffensive across the mountains and push the Japanese back toward the Buna area.
- 4 November 16, 1942–January 31, 1943:** New Guinea Force (the Australian 7th Division and American 32d Infantry Division) reduces the Japanese defenses in the Buna area. The position around Buna itself falls on January 2, 1943. Seven Australian infantry brigades and four American infantry regiments participate in the fighting.
- 5 February 1943–March 1944:** The Australian-led New Guinea Force – including at different times the Australian 3rd, 5th, 7th, and 9th divisions, the US 41st Infantry Division, and the US 503d PIR – defeats the Japanese 18th Army. In March 1944, the 18th Army tries to concentrate around Wewak.
- 6 April 22, 1944:** Amphibious assaults are conducted by the Allies at Hollandia (I Corps) and Aitape (163d RCT). Few casualties are suffered because the bulk of Japanese troops in these areas are either rear-area units or Imperial Japanese Army Air Force.
- 7 April 26, 1944:** The 18th Army starts to move its main combat forces west toward Aitape, intending to attack the American forces there.
- 8 May 17, 1944:** Alamo Force lands the 163d RCT in the Wakde–Sarmi area. Wakde Island is captured during the following days. Because the Japanese 36th Division (less its 222nd Infantry Regiment) is positioned around Sarmi, additional troops are needed to secure the area. The 36th Division spends the rest of the war isolated around Sarmi.
- 9 May 27, 1944:** The 41st Infantry Division lands on Biak. This begins a fight with the 222nd Infantry Regiment that lasts through June and July. Mopping-up actions continue until the end of the war.
- 10 May–July 1944:** Allied intelligence identifies the 18th Army's intention to attack Aitape. The American force there is increased to two reinforced divisions and XI Corps is placed in command.
- 11 July 2, 1944:** The 158th RCT lands on Noemfoor Island and eliminates the Japanese garrison.
- 12 July 10–August 25, 1944:** The 18th Army attacks the Americans near Aitape. XI Corps defeats the 18th Army and eliminates much of its combat power. The Japanese retreat toward Wewak and the 18th Army tries to feed itself from local food sources for the rest of the war.
- 13 July 30, 1944:** Elements of the US 6th Infantry Division land near Cape Sansapor on the western tip of New Guinea. No organized resistance is encountered. Japanese forces along the north New Guinea coast are now cut off from Japan.

NGF was opposed by the IJA's 18th Army, activated in late 1942 to command the eastern New Guinea battles. It found itself defeated by the Australians and suffered heavy losses of men, weapons, and supplies. Alamo Force also fought the 18th Army during action on eastern New Guinea, especially at Aitape. West of Hollandia, the 2nd Army was in charge of defending Japanese positions along the New Guinea coast. By September 1944, both Japanese armies were badly battered and isolated.

War on New Guinea was nightmarish for both sides. Soldiers battled the jungles, insects, climate, and disease as much if not more than the enemy. There were no cities to liberate and no population to welcome the men. New Guinea did, however, see the clash of two very different armies, the US Army and the IJA. Most of the American infantry that experienced sustained combat on the island came from the US Army National Guard, and it was on New Guinea that these citizen soldiers showed that they were more than capable of defeating the vaunted Imperial Japanese Army.

PACIFIC OCEAN

ADMIRALTY ISLANDS

Bismarck Sea

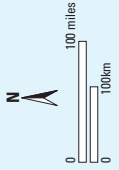
Alamo Force

NEW GUINEA

NEW BRITAIN

Coral Sea

AUSTRALIA



The Opposing Sides

ORGANIZATION AND HISTORY

American

The National Guard is descended from states' militias that have existed since colonial days. During the 19th century, however, federal employment of militias in wartime was fraught with problems. As a consequence the federal government resorted to raising short-term volunteer forces subject to direct national control, even though states were responsible for recruitment, formation, and initial selection of officers. In 1903, Congress passed legislation dividing the militia into two parts; a federally funded organized militia (to be named the National Guard), and a state-funded Reserve Militia. Federally funded units used the same organization as regulars and were to meet the same training requirements. The National Defense Act of 1916 added new regulations and mandated use of the name National Guard. In World War I the National Guard was mobilized and formed 17 infantry divisions, numbered consecutively as the 26th through 42d. In 1933 the National Guard Mobilization Act separated federally funded National Guard units from other state-funded forces and required Guardsmen to enlist jointly with their states and the federal government. The goal of this legislation was to ensure that the regulars, the National Guard, and newly formed units were integrated into a single US Army.

Following France's military collapse in May–June 1940, the National Guard was federalized (ordered into federal service) beginning September 1940: 18 US Army National Guard infantry divisions numbered 26th through 38th, 40th, 41st, and 43d through 45th were mobilized (the 39th Infantry Division had been disbanded in 1923 and the 42d Infantry Division was not activated until July 1943). In late 1941 and early 1942, these were converted from World War I "square" divisions with four infantry regiments each to new-



style “triangular” divisions by removing one infantry regiment. Three surplus US Army National Guard infantry regiments were deployed to garrison the French island of New Caledonia in the South Pacific in early 1942 and were subsequently organized into a new infantry division (the 23d) named the “Americal” (for American/New Caledonia). Three infantry regiments were incorporated into Regular Army infantry divisions, while others became separate infantry regiments, were converted to other types of units, or were deactivated. Peacetime National Guard units were understrength and the need for officers, NCOs, and men with technical skills meant that prewar Guardsmen frequently transferred to other units. Therefore, once federalized, all the National Guard units received large numbers of draftees from across the nation.

During World War II an American infantry division consisted of three infantry regiments, four field-artillery battalions, an engineer combat battalion, a reconnaissance troop, and medical and technical support units. The basic divisional organization remained the same during World War II except for minor changes in numbers of personnel and equipment. Each infantry regiment consisted of a headquarters and headquarters company,

Soldiers of the 132d Infantry Regiment (from the Illinois National Guard) of the Americal Division advance through jungles on Bougainville in the Solomon Islands. American soldiers fighting in the jungles of New Guinea and the Solomon Islands faced many of the same tropical environmental issues as well as a fierce and deadly enemy. Despite the Americans’ air, naval, and artillery firepower, victory required that infantry close with and destroy the enemy. (Pictorial Parade/Archive Photos/Getty Images)



This American infantryman of the 1/128th Infantry is cautiously approaching suspected Japanese positions within the Duropa Plantation. Danger from heat exhaustion in the highly humid tropical climate of Buna caused him and his compatriots to carry only weapons, ammunition, and water into combat. The soldier himself has been unable to bathe and shave regularly. He is beginning to suffer the effects of poor rations and probably has malaria.

Duropa Plantation, November 30, 1942



Weapons, dress, and equipment

This soldier's rifle (1) is the semiautomatic M1 Garand, which was replacing the bolt-action Springfield M1903.

His 1941 herringbone cotton twill (HBT) uniform jacket (2) is single breasted with five metal tack buttons in front, a waist band with two additional buttons, and two patch-type breast pockets with a split pleat in the center and a flap secured by a single metal tack button. Trousers (3) are of the same material. He wears leggings (4) and the brown Army service shoes (5). The jacket and trousers had been dyed green in Australia before deployment to New Guinea. After over a

month of wear in the New Guinea jungle, the soldier's uniform is dirty and torn, but replacement clothing was not available.

The soldier wears an M1923 cartridge belt (6) with ten M1 cartridge pockets, and a six-pocket cotton bandoleer (7) across his left shoulder. He has an M1910 canteen (8) and the M1905 bayonet in its scabbard plate (9). In the jungle, bayonets were frequently left in the scabbard because, when attached to a rifle, they could become entangled in the vegetation. All personnel carried an M1924 first-aid pouch (10). His helmet (11) is the M1 model.

a service company, an antitank company, a cannon company, and three infantry battalions. Each infantry battalion was composed of a headquarters and headquarters company, a heavy-weapons company, and three rifle companies. Divisional artillery included three battalions of 105mm howitzers (12 guns per battalion) and one 12-gun battalion of 155mm howitzers. Tanks, tank destroyers, antiaircraft artillery, and additional field artillery were attached to infantry divisions on an as-needed basis from higher headquarters' asset pools.

The American units that saw the most combat during the New Guinea and Papuan campaigns were from the National Guard. This study examines the 32d Infantry Division (Wisconsin and Michigan), the 41st Infantry Division (Idaho, Montana, North Dakota, Oregon, and Washington), and the dismounted 112th Cavalry Regiment from Texas. Other National Guard units fighting on New Guinea included elements of the 31st Infantry Division (Alabama, Florida, Louisiana, and Mississippi), the 43d Infantry Division (Connecticut, Maine, Rhode Island, and Vermont), and the 158th Infantry Regiment (Separate) from Arizona.

Japanese

The Imperial Japanese Army (IJA, or "Army of the Greater Japanese Empire") was founded in 1872, 19 years after the "Opening of Japan" to westerners following the visit of the US Navy's Commodore Matthew C. Perry in 1853. The IJA was initially developed with the aid of a French military mission, but after France's defeat by Germany in 1871 the French advisors were replaced by Germans. National conscription started in 1873. An IJA General Staff Office was established in 1878, based on the German General Staff model. The IJA General Staff reported directly to the Emperor. Both the IJA and IJN had a special relationship with the Emperor that excluded civilian influence.

Japan built a modern, Western-style army. By the early 1890s the IJA was the most modern army in Asia. In July 1894, at the start of the First Sino-Japanese War (1894–95), the IJA consisted of six regionally based infantry divisions and the Imperial Guard Division. When war with Russia started in 1904, the IJA had 12 regionally based infantry divisions plus the Imperial Guards. During the Russo-Japanese War (1904–05), four new infantry divisions were formed. By 1920 the IJA counted 21 infantry divisions, all with four infantry regiments. In 1925 four infantry divisions and their districts were eliminated due to budget reductions. No more infantry divisions were formed until 1937, when more units were needed for the Second Sino-Japanese War (1937–45). In September 1937 six infantry divisions were added. On December 7, 1941, there were 51 IJA infantry divisions and 59 separate brigade-sized units.

The IJA had multiple divisional structures during World War II. The infantry divisions that engaged the American forces on New Guinea were all "triangular," i.e. having three infantry regiments each, and were of three types: "A" (prewar regular infantry divisions); "B" (wartime service infantry divisions or "standard"); and specially organized "Ocean" infantry divisions. The combat units of a "standard" infantry division consisted of a headquarters, an "infantry group" (brigade) headquarters, three infantry regiments, one artillery

regiment, a battalion-sized cavalry (reconnaissance) regiment, and an engineer regiment.

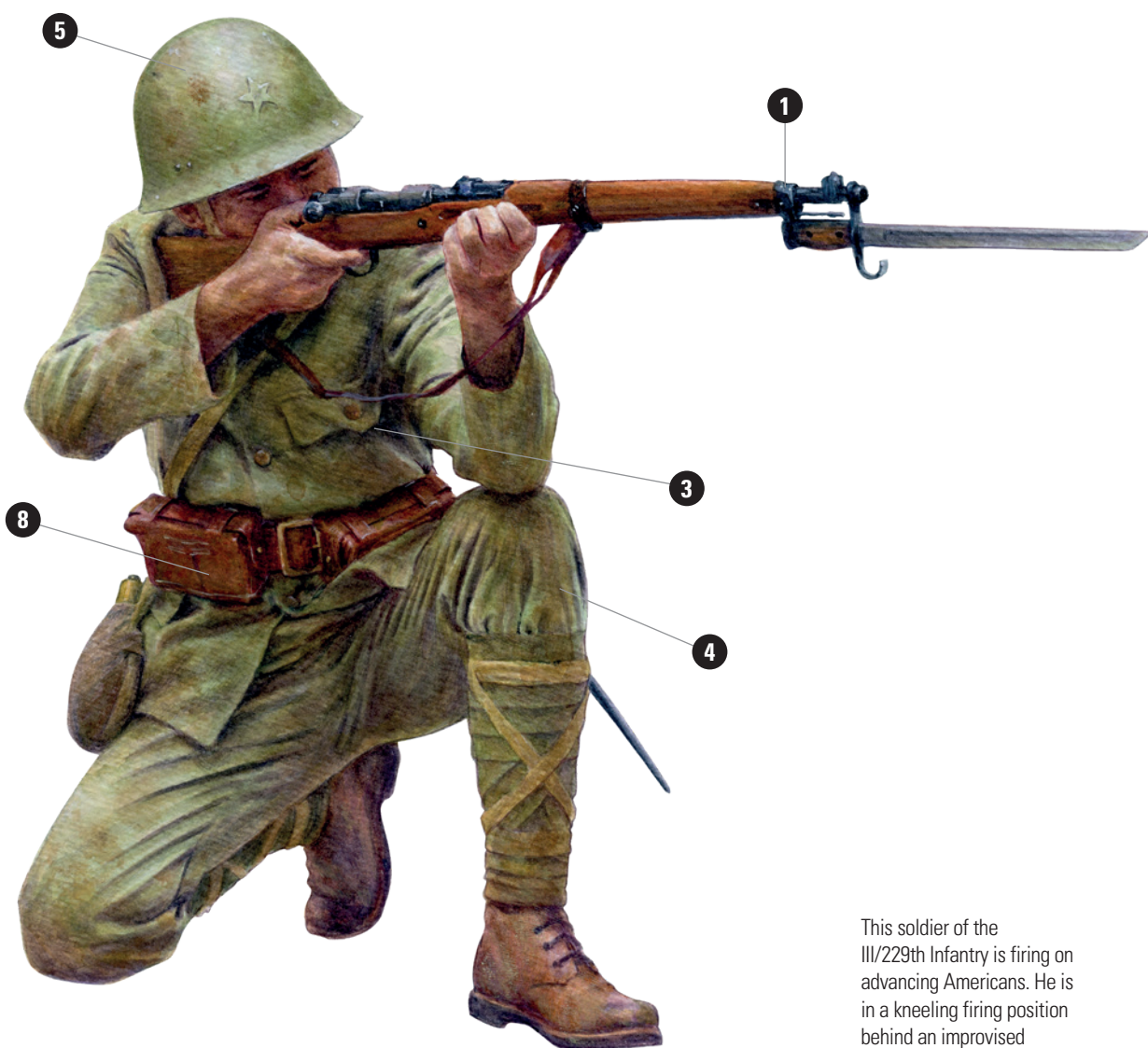
The infantry regiment consisted of a regimental gun company, an antitank company, and three infantry battalions, each infantry battalion having four (or three) rifle companies, a machine-gun company, and an infantry-gun platoon. Mortars were not commonly used within IJA infantry regiments; instead they were grouped into independent battalions, two of which were sent to New Guinea. The IJA artillery regiment was either a field (towed) unit or a mountain (pack) unit. Each artillery regiment had three battalions, each fielding three batteries with four cannons apiece, although units sent to New Guinea were altered to three artillery pieces (usually mountain guns) per battery.

Ocean-type infantry divisions consisted of three infantry regiments that had absorbed the divisional artillery and other units to provide three self-contained combat teams; US intelligence referred to these as “regimental combat team divisions.” The Ocean-type infantry division included a sea-transport regiment of self-propelled barges. Two of the infantry regiments were structured as static-defense units with three infantry battalions and one artillery battalion each. The third infantry regiment was configured to be transported by barges and consisted of three infantry battalions (each with a mortar company and a mountain-artillery battery), a regimental engineer company, and a regimental tank company.

At Buna, American forces encountered detachments drawn from the 41st Infantry Regiment, 144th Infantry Regiment, and the 2nd Battalion, 239th Infantry Regiment (II/239th Infantry). The IJA’s 20th Division (Type A), 41st Division (Type B), and elements of the 51st Division (Type B) fought at Aitape. The barge-transportable 222nd Infantry Regiment of the Ocean-type 36th Division and several companies of the 35th Division (Type B) fought on Biak. Except for the II/239th Infantry at Buna and the 222nd Infantry Regiment on Biak, Japanese units in these actions were understrength, ill-supplied, and weakened from previous battles.



A Japanese sentry stands guard somewhere in Papua New Guinea in 1942 in this posed ‘rear area’ photograph of a well-equipped and -fed soldier. Both sides made extensive use of posed photographs to present a favorable picture to their home populations. While Japan’s leaders tried to keep the Japanese public fed with images of success and victory, some American leaders began to release harsher and darker images to show the home front that war was a serious and ugly business. (Imagno/Getty Images)



This soldier of the III/229th Infantry is firing on advancing Americans. He is in a kneeling firing position behind an improvised breastwork outside the entrance of a bunker.

Duropa Plantation, November 30, 1942



Weapons, dress, and equipment

This soldier is armed with an Arisaka Type 99 rifle (1) with its Type 30 bayonet (2) fixed. The 7.7mm bolt-action Type 99 was designed in 1939 based on combat experience in China. Over 3.5 million Type 99s were produced from 1939 through 1945.

He is wearing the Type 98 summer cotton uniform with jacket (3) and trousers (4). The uniform's light cotton fabric rapidly deteriorated in the tropical climate of New Guinea. His helmet (5) is a Type 92, which was of low grade and offered little protection from bullets or shrapnel. His Type 5 marching shoes (6) were made of horsehide and

were hobnailed, with a metal-rimmed heel; these shoes decayed quickly in the tropics.

His Type 30 personal equipment consists of a belt (7), two cartridge boxes (8) in the front each holding 30 rounds, and a larger cartridge box (9) worn in the rear with 60 rounds (and a gun oil tube on the box's right side). His canteen (10) is a Type 94 on a web sling. Belts and cartridge boxes are leather, which was unsuited for humid tropical environments. The bayonet holder (11) is attached to his belt.

The US Army placed great reliance on individual marksmanship. The use of the M1 Garand semiautomatic rifle, coupled with individual shooting skills, meant the BAR was seen as an adequate squad automatic weapon by the US Army's leadership. This attitude was in contrast to the British Commonwealth, German, and Japanese armies, which provided a light machine gun to each squad. Here, a soldier demonstrates marksmanship with an M1 Garand under ideal circumstances that were hardly ever found in combat. The .30-06 M1 Garand, designed by John C. Garand in 1928, entered US military service in 1936 and was the standard service rifle until 1958. Gas-operated, it used an eight-round clip. The M1 was 43.6in long and weighed 9.5lb. It had a muzzle velocity of 2,800ft/sec and an effective range of 500yd. (Gjon Mili/The LIFE Picture Collection via Getty Images)



RECRUITMENT AND TRAINING

American

National Guard infantry divisions were formed from one or several neighboring states, thus fostering at least a regional comradeship. Training was undertaken on weekends and during annual camps. Many officers were local community leaders and could know their subordinates as neighbors, business associates, employees, or customers. Membership in the National Guard became politically important in many communities. Civic leaders were frequently expected to hold military rank as a sign of their commitment to the public good. This created situations in which political-office holders found themselves junior to constituents or having to discipline their potential voters.

When federalized, National Guard units were understrength. They suffered personnel turbulence as skilled men were transferred to technical units and cadres were extracted for newly formed units. New draftees from across the nation were assigned to replace these men. Because of the demand for technically oriented men for the USAAF and other branches, the US Army developed a system of classifying men that

recognized differences in age, physical hardihood, mental endowment, education, occupational skill, and capacity for assuming responsibility, with the object of adapting these various personal aptitudes to military requirements. The purposes of the system, in ascending order of importance, were to maintain morale by giving men suitable assignments; to simplify, hasten, and economize the training effort; and to organize the available manpower in such a way as to deliver in the shortest time the maximum force against the enemy. (Palmer et al. 1991: 2)

An unintended consequence of this classification system was that a greater share of lower-classified men were assigned to ground-combat duty. In 1943, 44 percent of the more than 1 million men sent to ground-combat duty (infantry, field artillery, armor, and engineers) were rated in the two lowest classes (IV and V). Infantry received a higher percentage of the lower classes because other ground arms required technical skills. Lower quality resulted in lower combat effectiveness

and greater losses, however, as reported by the Fifth US Army in Italy: "Squad leaders and patrol leaders with initiative were scarce ... The assignment of Grade V intelligence men to infantry is murder" (Palmer et al. 1991: 50).

National Guard infantry divisions spent 1941 training in the United States and participating in large-scale maneuvers focused toward combined-arms warfare suitable for European operations. The 41st Infantry Division was ordered to Australia in February 1942 and the 32d Infantry Division likewise in March 1942. Assembling these units for embarkation, receiving new personnel (3,000 new men for the 32d Infantry Division), and shipping them meant they arrived in Australia in April and May 1942, respectively. Both infantry divisions received limited jungle training in Queensland and advice from the Australians before being sent into combat in Papua. The 41st Infantry Division benefited from more training than the 32d Infantry Division before being committed to combat.

Japanese

The IJA was a conscript army; all men subject to the Emperor of Japan and aged 17 to 40 were liable for military service, with only the seriously disabled and certain criminals exempted. Before the war, active duty was for two years, followed by service in the reserves until age 40. Wartime mobilization resulted in active service being extended for the duration of hostilities.

IJA formations were based on 16 divisional districts. Each district was responsible for multiple divisions; the Sendai district was home to the 2nd, 13th, and 42nd divisions, and part of the 31st Division. Divisional districts served to create regionally based units with community bonds. Conscripts were trained at regimental depots within the districts and then sent on to regiments in the field.

From the first day of service special attention was given to impress upon the IJA soldier a sense of unquestioning loyalty and duty to the Emperor.



Japanese infantry advancing. This photograph shows IJA troops moving along a trail bordered by trees and brush. Two riflemen lead a gunner carrying a light machine gun. One soldier, probably an ammunition carrier, is moving to the gunner's right near the tree line. Meanwhile, three riflemen lie in the brush to the left of the trail. (© CORBIS/Corbis via Getty Images)

This was based on the Imperial Re-script to Soldiers that was issued by the Emperor Meiji (r. 1867–1912) on January 4, 1882. This stated that soldiers were to regard orders from commanders as directives from the Emperor himself. Superiors constantly emphasized the IJA's five principles of military ethics: loyalty, courtesy, courage, truthfulness, and frugality.

IJA soldier training was based on unquestioning obedience to superiors. New conscripts were frequently treated with a degree of brutality that would have been unacceptable in the US military. Infantry training started at squad level and included individual rifle, bayonet, and physical training. Next was platoon-level instruction, followed by company, battalion, and regimental training. At each stage there was a toughening-up process that increased in intensity. The end goal was to train IJA soldiers to endure hunger and fatigue for long periods while remaining combat effective.

Jungle warfare is a war of small infantry units, as recognized by the US Army before the war: "Jungle fighting is performed largely by infantry. Combat is characterized by close fighting. Support of infantry by other arms will frequently be impracticable or impossible" (FM 31-20 1941: 21). IJA training was based on experience fighting the Chinese since 1937. Consequently, IJA units had not specifically trained for jungle warfare before they went into a jungle environment. However, as the IJA placed great store in small-unit infantry tactics and had trained accordingly, its units were able to perform quite well in the jungle environments of Malaya, East Indies, Burma, and the Philippines during the opening months of World War II in the Pacific.

Two American soldiers approach the entrance to a Japanese position ready to fire their M1 Garand rifles. Japanese positions were well camouflaged and covered with fast-growing jungle plants. Positions were sited to provide overlapping fire zones and to be mutually supporting. It was difficult to see Japanese positions and many were bypassed unintentionally. The defenders would then start firing on the rear of the American troops. (US Army)

DOCTRINE AND FIREPOWER

The two armies were built upon different doctrinal foundations, but neither doctrine was intended for fighting a Pacific ground war on islands or in





The ever-present danger of ambush caused infantrymen on both sides to advance with caution through the tropical foliage. In this photograph a US Army photographer with an advance infantry squad in the Philippines captured the front-line environment. For the riflemen at point, the next step could be their last if concealed Japanese should open fire. An infantryman with a Browning Automatic Rifle (BAR) is in the right foreground. The BAR used the Army's standard .30-06 Springfield rifle cartridge; the weapon was 47.8in long, had a rate of fire of 500rd/min, and an effective range of 1,500yd. However, its battlefield rate of fire was reduced by the need to change the 20-round magazines. (US Army)

jungles. US Army doctrine was for fighting a mechanized combined-arms battle in Europe and was derived from World War I experience. The IJA's doctrine was based on fighting the Soviet Union in Manchuria and looked to the Russo-Japanese War for inspiration. The differences between these adversaries were expressed by the US Army Ground Forces as follows:

To the Japanese, machines of war – from the heavy machine guns to the tank – are only incidentals in warfare, We Americans realize that the infantry must perform the tasks of actually taking over the ground and holding it but we use every available machine of war to prevent unnecessary losses. In contrast, the Japanese do not conceive of substituting the shock action of war machines for the shock action of infantry and they merely strengthen the shock action of troops by the assistance of the machines. The Japanese Army is an army of men, supported by machines of war; ours is an army using machines of war. This is a fine distinction and perhaps not readily understood but every statement of Japanese military policy bears this out. (Combat Lessons Gained from Overseas Observations HQ Army Ground Forces 1945: 2)

American

American doctrine emphasized the teaming of infantry with artillery, tanks, and crew-served infantry-support weapons – methods that had worked well enough for the American Expeditionary Forces (AEF) in 1918 on the Western Front. Unsupported infantry attacks were considered unsound and wasteful of lives. In defense, artillery provided the means to break up or disrupt an attack before it could reach the defending infantry. This doctrine allowed a reduction in numbers of riflemen and an increase in heavy crew-served weapons.

US Army infantry regiments each had 972 riflemen in 81 12-man rifle squads. Within the infantry regiment, crew-served weapons provided the greatest share of firepower. In 1944 these weapons included: six lightened 105mm M3 howitzers in the regimental cannon company (this was frequently used as an improvised rifle company, however, especially on New Guinea); 18 57mm antitank guns; 18 81mm mortars; 27 60mm mortars; 26 .50-caliber heavy machine guns; 24 heavy (water cooled) and 18 light (air cooled) .30-caliber machine guns; and 103 2.36in rocket launchers (bazookas). The weapons were manned and maintained by over 1,000 men in antitank and heavy-weapons platoons and companies as well as headquarters and service companies. Indeed, there were more heavy-weapons crewmen than riflemen in the infantry regiment. Commanders frequently used heavy machine guns from headquarters and service units to supplement their infantry's firepower.

This doctrine led to field artillery supplying the greatest firepower of the US Army. A light-field-artillery battalion of 12 105mm howitzers would be assigned to support an infantry regiment. This battalion could coordinate all divisional artillery (36 105mm and 12 155mm howitzers) and any attached artillery in support of a single infantry regiment when needed. Extra artillery was provided by a large pool of field-artillery battalions that were not part of infantry divisions. On June 30, 1944, this artillery pool included 116 heavy, 112 medium, and 87 light-field-artillery battalions. Infantry divisions not actively engaged would loan their organic artillery to other infantry divisions. With an artillery command-and-control capability to mass multiple battalions

The .30-caliber M1919 air-cooled medium machine gun was designed by John M. Browning. The M1919A4 was the most common variant used by American forces in World War II. It weighed 31lb, was fed from a 250-round belt, and had a rate of fire of 400–600rd/min. (US Army)





of artillery to firing time-on-target missions (with all rounds hitting the target at the same time), infantry came to rely on artillery to win their battles.

Whenever possible, tanks (e.g. M4 medium tanks) or self-propelled tank destroyers (e.g. M10 Hellcats) would provide infantry support by acting as assault guns. Infantry attacks frequently became a matter of moving the artillery's forward observers to the next vantage points. This materiel-intensive method of fighting caused some to say the Americans did not fight in a jungle; instead they destroyed it and then advanced. It must be remembered, though, that American doctrine preferred the expenditure of munitions rather than of lives – as did American infantrymen, and ultimately the nation. A Japanese diary captured at Buna described this American approach (without, it should be noted, normal artillery support): “The nature of the enemy is superior and they excel in firing technique. Their tactics are to neutralize our positions with fire power, approach our positions under concentrated mortar fire” (GC Buna Force 1943: 62).

On paper, US Army rifle squads each had 12 men: one squad leader, an assistant squad leader, a three-man automatic-rifle team, and seven riflemen. Three rifle squads formed a rifle platoon; three rifle platoons and a heavy-weapons platoon constituted a rifle company. The rifle squad was armed with one magazine-fed .30-caliber Browning Automatic Rifle (BAR) and .30-caliber M1 Garand semiautomatic rifles. The US Army emphasized the shooting skills of individual soldiers armed with M1 Garands to provide firepower. One .30-caliber M1903 Springfield rifle was used by the assistant squad leader as a rifle-grenade launcher until 1944, when a grenade launcher for the M1 Garand was issued. A BAR weighed less than a light machine gun and was easier to handle, but it had a lower rate of fire. When faced with enemies armed with light machine guns, American infantrymen could feel they were outgunned and become more hesitant than usual to close with an enemy.

ABOVE LEFT

The .30-caliber M1917A1 water-cooled heavy machine gun was another John M. Browning development. It was fed the US Army's standard .30-06 M1906 cartridge by a 250-round belt. The M1917A1 weighed 103lb with tripod, water, and ammunition. Eight of these guns equipped each heavy-weapons company. (PhotoQuest/Getty Images)

ABOVE RIGHT

Six 81mm M1 mortars were assigned to an American infantry battalion's heavy-weapons company. The M1 tube, base plate, and mount totaled 136lb. The M1 fired rounds that weighed from 6.87lb (light HE) to 15lb (heavy HE). The light round's range was 3 miles and the heavy round's was 1,200yd. Heavy HE rounds had a burst radius equivalent to that of a 105mm howitzer round. (US Army)

Japanese

According to a US Army study dating from 1944,

BELOW LEFT

The Type 96 light machine gun fired the 6.5x50mm Arisaka round and was fed from a 30-round box magazine. It was in wide usage during the war even as it was being superseded by the Type 99 light machine gun. The Type 96, production of which ended in 1943, weighed 20lb and was 42in long. In keeping with the IJA's belief in bayonet assaults, it could be fitted with a bayonet. Its effective range was 870yd, although in the jungles of New Guinea ranges were considerably shorter. (US Marine Corps)

BELOW RIGHT

The Type 99 light machine gun replaced the Type 96 during the war. The Type 99 used the larger 7.7x58mm Arisaka round which provided greater hitting power. The Type 99 was easily recognized by the cone-shaped flash suppressor. It too used a 30-round box magazine. The Type 99 weighed 22.9lb and had an effective range of 2,200yd. Each IJA infantry squad was authorized one Type 96 or Type 99 light machine gun. (US Marine Corps)

Japanese tactical doctrine insists vigorously on the inherent superiority of the offense, and Field Service Regulations state that the offensive should be resolutely taken ... The Japanese seem to feel there is some mystic virtue in the attack and defensive combat is looked upon as a negative form of action to be adopted only when confronted with a markedly superior enemy ... Both as a result of this training and because of faith in the offensive doctrine, Japanese officers often reach attack decisions where, by all orthodox tactics, the situation patently requires some form of defensive action. Their teachings have been found to place very little emphasis on time and space factors, with the result that concentration of effort and the cooperation of all arms are frequently neglected. (US War Department 1944: 85–86)

Japanese doctrine was rooted in the IJA's 1908 Infantry Manual, which was based on lessons learned during the Russo-Japanese War. Infantry was the IJA's king of battle, and the extent of this fixation with infantry was shown when the IJA reduced its artillery strength to maintain its infantry strength during force reductions implemented in the early 1920s. The IJA's doctrine held that properly trained, properly led, and highly motivated infantry could offset materiel inferiority.

Even with the emphasis on infantry as the decisive arm, the IJA did not have a doctrine for jungle warfare. This was because IJA commanders assumed their opponent would be the Soviet Union and envisioned the IJA's next war as being in Manchuria. Japanese planners believed that the open plains of Manchuria would allow their highly motivated infantry to find and exploit Soviet flanks. Night attacks were an essential element of this doctrine. Therefore, the IJA believed its troops could encircle and destroy the enemy and negate any materiel disadvantage. IJA commanders viewed infantry losses as necessary to gain victory.

This approach to war required the IJA to have large infantry units. An IJA infantry regiment contained more infantrymen than a US Army one. With 144 13-man squads in infantry regiments with four companies per infantry battalion, or 108 13-man squads in infantry regiments with three





A display of captured Japanese weapons including a tripod-mounted 7.7mm-caliber Type 92 air-cooled heavy machine gun. In the foreground on the right is a 6.5mm light machine gun. To its left are four Type 96 light machine guns. The weapon on the far left is a 20mm Type 97 antitank rifle. The individual shown here is holding an Arisaka Type 99 bolt-action rifle with its bayonet fixed. This rifle fired 7.7x58mm Arisaka rounds. (US Marine Corps)

companies per infantry battalion, the IJA infantry regiment had 1,872, or 1,404, infantrymen compared to 972 men in the US Army infantry regiment. Japanese infantry had fewer crew-served support weapons. Within the standard infantry regiment were 36 7.7mm-caliber air-cooled heavy machine guns (24 in some regiments), six 37mm antitank guns, six 70mm infantry guns, and four 75mm infantry cannons. In terms of firepower, the infantry regiment's infantry platoons relied on 6.5mm- or 7.7mm-caliber light machine guns in three squads and three 50mm grenade dischargers in the fourth squad of each platoon.

IJA artillery was weak compared to the American equivalent. IJA infantry divisions on New Guinea only had 75mm field and mountain artillery. There were no larger-caliber field batteries attached to infantry divisions. Outgunned, outranged, and lacking the fire-direction centers of US Army artillery, the IJA used artillery pieces singly or in "penny packets." Japanese tanks were only encountered on Biak, and there the Type 95 Ha-Gō light tank armed with a 37mm main gun was no match for the 75mm-armed M4A1 medium tank fielded by the Americans.

The IJA's doctrine of infantry-centered warfare failed when employed on the Manchurian Plain at Nomonhan against the Soviets in the summer and fall of 1939. Here an incident along the border between Outer Mongolia and Manchukuo (Soviet and Japanese satellite states, respectively) resulted in a one-sided, modern, mechanized, combined-arms attack. The Japanese were soundly defeated by massed Soviet artillery, armor, and air power. The Soviets also demonstrated a truckborne logistical capability the IJA could not match. Despite this debacle, the IJA ignored its lessons and went to war in the Pacific with its doctrine unchanged. In December 1941 the IJA believed its semimystical martial spirit would counter modern military technology.

LEADERSHIP AND COMMUNICATIONS

BELOW LEFT

With radios rendered unreliable in the jungle due to foliage blocking their signals, field telephones were necessary; but using them meant that wires had to be laid to connect command posts and positions. Here a pair of signalmen, identified by the white circles, are placing wire in dense jungle. Wires would frequently break, however, and maintaining them was a constant chore – and lurking Japanese would often ambush the wire parties. (US Army)

BELOW RIGHT

An EE-8 field telephone in use. The EE-8 was the standard US Army field-telephone set, hand-carried in a small case that included the ringer and batteries. This example was still in working order after being hit by a fragment from a Japanese grenade. In the jungle, wire communications were heavily relied upon. The EE-8 and the sound-powered telephone were used for long and short distances, respectively. (US Army)

American

In 1940 the US Army had 14,000 professional officers. This number could only be increased by recalling to active duty men who had resigned or retired from the regular Army and speeding up graduations from the US Military Academy at West Point, New York. The National Guard on mobilization added 18,000 officers and about 80,000 from the Officers' Reserve Corps, including college graduates educated in the Reserve Officers' Training Corps (ROTC) who had continued their military studies and training. By 1943 the officer corps included 15,000 regulars, 19,000 Guardsmen, 180,000 reservists, 100,000 commissioned directly from civilian life who had technical or administrative skills that could be used without military training (about half were doctors, dentists, and chaplains), and 300,000 graduates of wartime officer candidate schools (OCS). OCS graduates were considered better leaders than ROTC officers because they had served in the ranks and appreciated what skills were needed as small-unit officers.

US Army NCOs came from the enlisted ranks through promotion within units. The US Army did not have an NCO school; and because of the demand from the USAAF, technical services, armor, and artillery for higher skills and education, the junior leadership within the rifle companies was often transferred away. This resulted in new officers and NCOs being forced to fill the breach. A great demand was placed on the rifle-platoon and squad leaders, 2d lieutenants and sergeants, especially in jungle warfare, but poor leadership resulted in poor battle efficiency. This was seen on the island of New Georgia in the Central Solomon Islands: "where junior and non-commissioned officers had broken down, panic spread among the men and needless sacrifice of manpower resulted. When stronger leaders were transferred to infected units, cases of war neurosis declined. Breakdown of privates from unit to unit was in direct proportion to breakdown among junior commanders, enlisted and commissioned" (Palmer et al. 1991: 50).



US front-line communications in 1942 (Buna) depended on field telephones and wire. Radios were limited in number and usefulness and were not compatible with infantry use in the jungle. Front-line infantry communications relied on message runners. By 1944 (Aitape and Biak), new radio technology provided each infantry company with seven SCR-536 “handie talkie” handheld AM radio transceivers. The manpack SCR-300 “walkie talkie” FM radio transceiver was employed by infantry battalions, which frequently would assign one to each company. The SCR-536 and the SCR-300 had respective ranges of 1 mile and 3 miles in clear terrain, but this was reduced by jungle foliage. Field telephones and wire were still used, but wires were vulnerable to being cut by friendly and enemy actions.

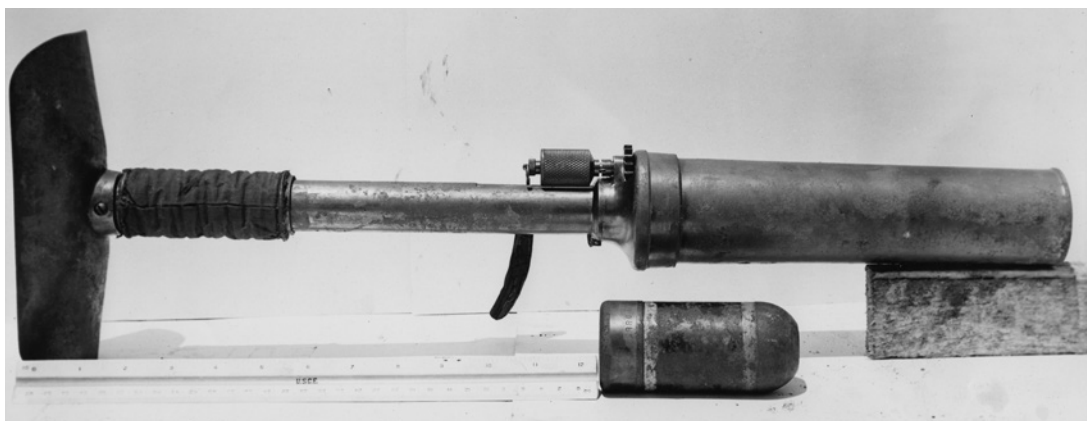
Japanese

The IJA had two classes of officers, regular and reserve, based on background and education. Regulars came from three sources: graduates of the Imperial Japanese Army Academy; graduates of selected technical schools, colleges, or universities who passed reserve officer candidate courses; and regular warrant officers and NCOs who were recommended by superiors. The last group rarely rose above captain because they were generally older men with years of experience. Reserve officers were mostly higher-caliber and educated conscripts selected during their first year of service to become officers. While regular Academy graduates dominated senior ranks, reserve officers provided much of the lower-level leadership in infantry units.

Non-commissioned officers were recruited primarily from conscripts. These were men who, after three months’ active service, volunteered to become NCOs, or men selected during their first year of service by their officers as potential NCOs. After one year of service in the ranks, these candidates were sent to NCO schools for a one-year course. These men were among the roughest in the ranks and held almost limitless authority over soldiers. Their role was not to inspire but to administer discipline, including use of physical punishments.

On paper, an IJA Type B infantry division was allocated about 30 radios, but the Japanese had nothing equivalent to the American handheld and manpack radios within infantry battalions. During the engagements

The IJA’s Type 89 grenade discharger, mistakenly called a knee mortar, was a muzzle-loaded rifled weapon firing a 50mm HE round weighing 1.25lb out to 737yd. The Type 89 weighed 10lb and was able to be brought into action quickly by its crew. It could be braced against any convenient object, although not a knee as the weapon’s recoil would break the kneecap (as Allied soldiers soon found out). The Type 89 was a platoon-level weapon and was supplied in plentiful numbers to the IJA’s infantry. (US Marine Corps)



The IJA used the 70mm Type 92 infantry gun instead of battalion-level mortars in most infantry battalions. When broken down it could be man-packed, and on New Guinea this proved key to moving it. The Type 92 had a range of 3,060yd and fired a shell weighing about 10lb, and it proved to be an effective infantry-support weapon. (US Marine Corps)



considered in this book, the IJA was deficient in field-communications equipment. Buna and Biak saw the Japanese defending prepared positions and able to rely on pre-installed wire field telephones. During the 18th Army's Aitape attack, however, Japanese battlefield communications were hampered by a severe lack of equipment. The 18th Army had been cut off from resupply and had lost heavily while retreating through New Guinea's jungles since September 1943. By this time the 18th Army's communications below infantry divisions relied on messengers.

LOGISTICS

Logistics were a major problem for both sides on New Guinea. The environment was harsh, and many of the inhabitants lived a Stone Age existence. Transportation was limited to coastal waters, rivers, and primitive tracks. Small grass airfields existed where traders, government offices, prospectors, or missionaries had built them. Existing ports were small and had limited capabilities, but everything needed by an industrial-age military had to be shipped in. Trucks were usable only around the few ports. Local food supplies could not support large numbers of troops. Once one moved any distance from the shoreline, supplying troops became difficult.

Lack of roads made supply difficult in the jungle. Infantrymen frequently were used to porter ammunition and rations while moving up to the front lines. Here, African-American soldiers of the 93d Infantry Division carry artillery shells across a river as they march to the front on Bougainville Island in July 1944. Such work was fatiguing to the infantry and could degrade their effectiveness until they could rest. (Bettmann/Getty Images)





American

In 1942 American forces fighting at Buna were at the far end of a weak logistical trail. This campaign showed the absolute need for naval and air superiority to enable ground combat. In 1942 the Allies utilized air transport and small coastal vessels to supply forces on the north coast. Several vessels were lost to Japanese air attacks and air transport would be turned back if Japanese aircraft were in the vicinity. The limited transport resources available resulted in the 32d Infantry Division fighting without its organic artillery; only one 105mm howitzer was airlifted in and the rest of the supporting artillery was limited to a few Australian 25-pdr guns and 3.7in mountain guns. The lack of artillery meant the 32d Infantry Division could not fight as it had trained.

The Americans responded to New Guinea's challenges by bringing in a large contingent of specialized and general-purpose engineering units. These included units such as naval construction battalions ("Seabees"), airborne airfield engineering battalions, engineer special brigades with landing craft and shore equipment, and general-purpose engineers. A large force of transport aircraft, centered around the Douglas C-47 Skytrain, made supply and movement by air feasible. By 1944, American operations frequently included more engineer and other support units than combat units. These support units built airfields, ports, roads, and bases. Americans did not attempt to move great distances through the jungles because, as they controlled the sea and sky, there was simply no need to do so. American offensives on New Guinea were focused on capturing airfields and anchorages, or locations where these could be built.

America's materiel war was possible because the US Navy and Merchant Marine could provide the ships needed to carry men, equipment, and supplies from ports in the United States to advanced bases. With little Japanese interference outside of immediate combat zones, the logistics "tail" functioned almost as if it were peacetime. Unlike the Atlantic and Mediterranean, where German U-boats forced extensive convoying of shipping, most Pacific cargo ships were routed individually. This was because the IJN seldom used their

An American innovation was the Naval Construction Battalion (NCB), the personnel of which quickly became known as "Seabees." These men were recruited from civil construction tradesmen. Age and physical standards were waived, with men up to age 50 accepted; later it was found that some men over 60 had managed to join up. Seabees had no qualms about fighting; their motto was (and is) *Construimus, Batuimus*, Latin for "We build, We fight." Seabees worked day and night to build airfields, ports, bases, roads, and anything else needed. Once, a Seabee unit built a 2,000yd airstrip from virgin jungle in just 20 days. (80-G-46090 courtesy of the Naval History and Heritage Command)

US Army troops moving in the jungle on Bougainville Island. This tropical jungle was similar to that faced by troops on New Guinea. The effects of heat and humidity combined with the difficulty of moving through the jungle exhausted troops quickly; and because they required large amounts of drinking water to replace what they lost in perspiration, extra canteens were provided to front-line combatants. (Bettmann/Getty Images)

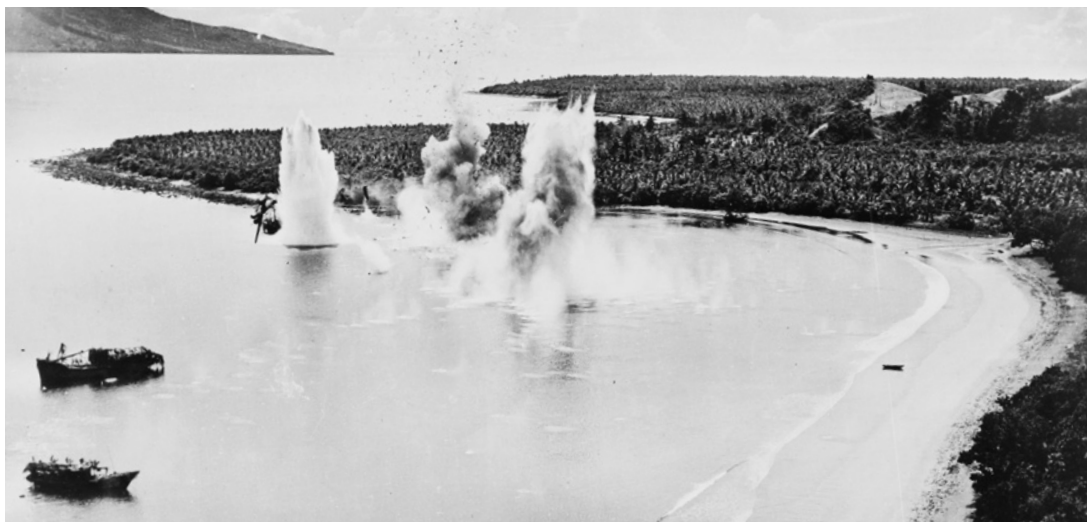


Hansa Bay on the northern coast of New Guinea served as one of the 18th Army's major bases before the westward retreat to Wesak. Small coastal freighters like the ones in this image were used to carry supplies to Japanese forces on New Guinea. Air strikes against Japanese shipping during 1943 helped the Australian offensive in eastern New Guinea and convinced the Japanese that the buildup of American amphibious forces was in order to conduct an operation against Hansa Bay. (Library of Congress, LCCN 92520272)

submarines to attack cargo ships, instead focusing on attacking warships, providing scouting for their fleet, and acting as supply vessels for isolated island garrisons.

Japanese

In China and Manchuria the IJA relied on draft or pack horses to provide transport for most units. Horses could not survive in the tropical conditions of New Guinea, however, so Chinese, Korean, and Indian prisoners of war were brought to New Guinea as laborers and porters to carry supplies; but these men had to be fed as well. Efforts to recruit indigenous people as porters had limited success, due to Japanese brutality and Australian influence upon the local population, which made it necessary to detail infantrymen and artillerymen to porter duty to keep the front line supplied. This reassignment



weakened Japanese combat strength in infantry and artillery. The infantry divisions sent to New Guinea replaced the four 75mm field guns in an artillery battery with three 75mm mountain guns; but without horses or trucks, the artillerymen had to carry their guns and ammunition through the jungle.

The Japanese logistics system quickly collapsed under Allied air and naval attacks after 1942. US Navy submarines attacked Japanese ships from the waters of the Home Islands through transit and off the ports of New Guinea. In 1944, convoys carrying the IJA's 32nd and 35th divisions to western New Guinea and neighboring islands were mauled by US Navy submarines. The 32nd Division was reduced to five infantry battalions and half its artillery, while the 35th Division was reduced to four infantry battalions and one artillery battery. Allied air attacks could also be devastating. On March 2–3, 1943 a Japanese convoy to Lae on New Guinea was attacked by USAAF and RAAF aircraft in what became known as the Battle of the Bismarck Sea. All eight transport ships and four of the eight escorting destroyers were sunk, resulting in the loss of over 3,600 men, including most of the 115th Infantry Regiment of the 51st Division. Artillery losses were four 150mm howitzers, three 100mm cannons, eight 75mm cannons, and six 70mm battalion guns.

Supplying IJA front-line units was difficult and replacement equipment became impossible to obtain. A large effort was made to use IJA and IJN motorized barges for coastal transport, but this effort failed as daylight movement was stopped by aircraft and US Navy PT boats, the latter serving as nocturnal barge hunter-killers. The logistical collapse was nowhere more evident than during the 18th Army's attacks in 1944 on American forces near Aitape. This attack depended on capturing food supplies from the Americans in order to feed the Japanese troops. Lack of transport required that several infantry battalions be used to porter supplies to the attacking force.



The IJA used handcarts to help move supplies in the field. Some of these were captured by the Allies and used in the Buna area. Such handcarts were poor substitutes for American motor transport, however, and were discarded as soon as possible. Ultimately, these carts were really just another aspect of the IJA's structural weakness, making it unable to prevail in a mid-20th-century conflict. (George Strock/The LIFE Picture Collection via Getty Images)

Buna

November 18, 1942—January 3, 1943

BACKGROUND TO BATTLE

The South Seas Detachment's thrust toward Port Moresby was halted due to US Marine Corps forces landing on Guadalcanal on August 7, 1942. This forced the Japanese to fight two campaigns simultaneously in the South Pacific. The Japanese decided to concentrate resources on Guadalcanal and on September 24 directed the South Seas Detachment to withdraw to a defensible position in the Owen Stanley Mountains and wait on the outcome of the Guadalcanal fighting. Australian forces followed the retreating Japanese and the Allies launched an offensive to recapture the Buna area.

Early in September the 126th and 128th Regimental Combat Teams (RCTs) of the 32d Infantry Division were sent to Port Moresby. Each RCT was composed of an infantry regiment, one platoon of the 114th Engineer Combat Battalion, and medical detachments. The field-artillery battalions attached to both RCTs were not sent to New Guinea and the regimental cannon companies left their howitzers behind. While the Australians advanced along the Kokoda Track attacking the Japanese, the RCTs began moving toward Buna. On October 6, the 2nd Battalion, 126th Infantry Regiment (2/126th) and the 126th Regimental Cannon and Antitank companies, acting as rifle companies, began crossing the Owen Stanley Mountains via the Kapa Kapa Trail. This trail, east of the Kokoda Track, crossed dense jungle and climbed over 8,000ft. Resupply was only possible by airdrop, and troops were placed on half-rations and suffered from exhaustion and tropical diseases. Heavy weapons and equipment could not be carried by the men over the mountains. Fortunately, an airstrip was discovered on the northern coast at Wanigela, 65 miles from Buna. This airstrip was used as a site from which to fly the 128th Infantry Regiment across the Owen Stanley Mountains during



Australian soldiers moving along a muddy trail on New Guinea during December 1943. During that year the Australians carried the burden of the ground war on New Guinea. They defeated the IJA's 18th Army and drove it westward, which allowed the Americans to build up their forces and prepare for the amphibious campaign of 1944. (Photo12/Universal Images Group via Getty Images)

October 14–18. From Wanigela, small coastal craft transported the regiment to Pongani, 23 miles from Buna. Another airstrip was hastily constructed at Pongani and the remainder of the 126th Infantry Regiment was flown in during November 9–11.

The Japanese prepared defenses in the Buna region. These consisted of three defensive positions from Gona on the Allied left to Buna village and airstrips on the Allied right. This last position was called Buna and was where most of the 32d Infantry Division would fight. The Japanese constructed a system of mutually supporting bunkers and blockhouses using 12in-diameter coconut-tree logs and oil drums filled with sand. These fortifications were covered with soil planted with fast-growing jungle vegetation. The vegetation frequently made it next to impossible to see a bunker at any distance. I Corps reported: “the enemy’s brilliant terrain utilization canalized all potential Allied attacks into four narrow fronts: (1) through the swamp in front of Buna Village, (2) against the fork, or so-called “Triangle”, of the Soputa-Buna track,

Australian troops ford a river on New Guinea. During the fighting before and around Buna, 17 Australian and 12 American infantry battalions were committed. After Buna, about one US Army divisional equivalent was in action compared to more than three Australian divisional equivalents. (US Army)

(3) across the narrow bridge between the strips, and (4) through the coconut plantation below Cape Endaiadere” (CG Buna Force 1943: 10).

Antiaircraft guns, coastal defense guns, and automatic weapons stripped from wrecked aircraft were incorporated in the Japanese defenses. The troops defending Buna were a mix of IJA and IJN ground forces. The IJA element included: a provisional unit of 300 144th Infantry Regiment replacements; the newly arrived veteran III/229th Infantry and the 2/38th Mountain Artillery (both from the 38th Division, the remainder of which was on Guadalcanal); one company of the 47th Field Antiaircraft Artillery Battalion; elements of the 15th Independent Engineer Regiment; and miscellaneous service troops. The IJA troops were led by the new commander of the 144th Infantry Regiment, Colonel Yamamoto Hiroshi, and defended the Duropa Plantation and the two airstrips. This location became the American right wing’s sector.

The IJN contingent included elements of the Yokosuka 5th and Sasebo 5th Special Naval Landing Forces (SNLF), and naval construction pioneers,



the latter being drafted laborers of little fighting value. The IJN units were commanded by IJN Captain Yasuda Yoshitatsu and defended Buna village and its approaches. This became the American left wing's sector. The defenders numbered approximately 1,600 men of the IJA and 900 men of the IJN. The personnel of the III/229th Infantry and the 144th Infantry Regiment's replacements were fresh troops and in excellent condition; and the III/229th Infantry troops were veterans of fighting in China, Hong Kong, and the Dutch East Indies. Japanese troops defending Buna village were confident, as recorded in a captured diary: "The morale of the troops is good because we feel reinforcements will come" (quoted in CG Buna Force 1943: 59).

Despite short rations, exhaustion, and tropical diseases, the 32d Infantry Division expected an easy victory – an expectation that began at the top of the chain of command. SWPA's intelligence report for November 14 estimated the Japanese strength as 2,000 men between Gona and Buna. In turn, Major General Edwin F. Harding, commander 32d Infantry Division, estimated his enemy as about one battalion. Some junior officers told their men that they would have an easy time; the enemy would be remnants of the forces the Australians had been fighting in the mountains. In fact, there were roughly 2,500 fresh Japanese troops at Buna.

Harding planned to attack on November 19. His left wing, initially composed of most of the 126th Infantry Regiment, was to attack Buna village. The right wing was to attack the New Strip and Duropa Plantation. The battle on the right would pit green US Army National Guard soldiers against IJA veterans. The right wing initially fielded the 128th Infantry Regiment minus the 2/128th Infantry, which was the division's reserve. Behind the 128th Infantry Regiment, most of the 1/126th Infantry was advancing along the coastal trail. Harding intended to attack with four infantry battalions separated by the large swamp. This plan was disrupted when Harding was ordered to shift the 126th Infantry Regiment (minus the 1/126th Infantry) to the Australian 7th Division to the west, thus reducing his attack force by one-half. To replace the 126th Infantry Regiment, Harding sent his reserve, the 2/128th Infantry. His attack would use three infantry battalions instead of four and he no longer had a reserve battalion. His artillery consisted of two Australian 3.7in mountain guns.



General Douglas MacArthur, Allied commander, Southwest Pacific Area, is accompanied here by his acting aide, Colonel Lloyd Lehrbas, on February 29, 1944, viewing the effects of a naval bombardment of the island of Los Negros in the Admiralty Islands. MacArthur gave general direction to his subordinates and allowed them to plan and execute operations. He did, however, insist that he was the face of SWPA to the press and public and kept subordinates out of public view. This led to animosity during and after World War II. (SC 187355 courtesy of the Naval History and Heritage Command)

Buna, November 18, 1942–January 3, 1943

MAP KEY

- 1 November 18, 1942:** The 32d Infantry Division advances toward Buna village and Cape Endaiadere on two trails separated by over 3,500yd of swamp.
- 2 0700hrs, November 19, 1942:** The 1/128th Infantry attacks along the coast toward Cape Endaiadere through the Duropa Plantation and the 3/128th Infantry attacks toward the footbridge between the two airstrips. Both attacks are stopped by the III/229th Infantry and the ad hoc battalion of 144th Infantry Regiment replacements. After several hours of fighting the Americans have made no significant progress and cannot reach the main line of resistance.
- 3 November 20, 1942:** The 1/128th Infantry renews its attack using small teams to infiltrate the Japanese defenses and knock out machine guns with grenades and close-range fire. These tactics advance the front several hundred yards.
- 4 c.1330hrs, November 21, 1942:** The 2/128th Infantry, moving toward Buna village, encounters resistance from SNLF troops. The Americans are stopped by heavy fire and, with swamps on both flanks, are unable to outflank the defenders.
- 5 1630hrs, November 21, 1942:** The 1/128th Infantry (on the right) and the newly arrived 1/126th Infantry (on the left) attack on a 300yd front. At the same time the 3/128th Infantry again tries to capture the footbridge. Both attacks are repelled by stubborn IJA defenders.
- 6 November 23, 1942:** The 2/126th Infantry joins the 2/128th Infantry on the left flank. With battalions scattered across the front, the 32d Infantry Division is reorganized into two commands: Urbana Force on the left and Warren Force

on the right. Attacks continue through the end of November without success.

- 7 December 1, 1942:** Lieutenant General Robert L. Eichelberger, commanding general I Corps, assumes command of American forces at Buna. He chooses to let the 32d Infantry Division conduct its previously planned attack across its front the next day while he and his staff observe it.
- 8 c.0830hrs, December 2, 1942:** The 32d Infantry Division's infantry mount attacks on both Urbana Force's and Warren Force's fronts. No progress is made. The following day, Eichelberger relieves Major General Edwin F. Harding of command of the 32d Infantry Division and replaces the commanders of Urbana and Warren forces. The next two weeks see several attacks, but more importantly, reorganization and rest of the American infantry, improvement in supply, and additional Australian artillery being brought in. Additionally, the 32d Infantry Division is reinforced with Australian-manned M3 light tanks and the veteran Australian 18th Infantry Brigade.
- 9 0700hrs, December 18, 1942:** Australian tanks and infantry on the right and Americans on the left launch a carefully prepared combined-arms attack on the Warren Force front. During the next ten days both airstrips are captured and the Japanese driven out of their defenses.
- 10 December 18–28, 1942:** Urbana Force pushes its line to the outskirts of Buna village.
- 11 January 3, 1943:** The last pockets of Japanese resistance are reduced and Buna village is secured.

Battlefield environment

From its western side, a branch of the Girua River, to its eastern side, the coast ½ mile south of Cape Endaiadere, the Buna battlefield was about 3½ miles long and ¾ mile deep. Most of the land was either swamp or waterlogged. The water table was found 3ft below the surface, making digging-in next to impossible. The swamps varied in depth and many were shoulder deep if one tried to wade across them. A large and deep swamp divided the battlefield into two sectors: one near Buna village on the west side, defended by IJN land forces, and one around the Duropa Plantation at Cape Endaiadere on the east side, defended by the IJA. Because of this swamp, it took a two-day march for the Americans to travel between these sectors.

What dry land existed was covered in *kunai* grass that could grow 6ft high, or was used as coconut plantations such as the Duropa Plantation. This plantation was 700yd by 300yd and the coconut palms were generally about 18ft apart. There were two airstrips on the battlefield: the Old Strip, southeast of Buna

village and southwest of Cape Endaiadere; and the New Strip, south of Cape Endaiadere and next to the Duropa Plantation. The Old Strip had been built before the war, but was expanded by the Japanese and used for naval fighters in August. The New Strip was built by the Japanese as a dummy airstrip to deceive Allied bombers. Incorporated into the Japanese defenses, and with only a few feet variation in elevations – the airstrip at Buna was 5ft above sea level; 7 miles inland the elevation was 10ft – the two airstrips gave the Japanese excellent fields of fire.

Fighting in this climate was exhausting. Air temperatures were as high as 96°F with relative humidity ranging from 78 to 85 percent. Heat indices (the measure of discomfort a person experiences, resulting from the combined effects of temperature and humidity) were dangerously high: at 90°F and 80 percent relative humidity the heat index was 113°F. A 1°F rise in temperature increased the heat index to 117°F. Soldiers required large quantities of drinking water and soon suffered the effects of heat exhaustion in this climate.

Grassland

Coconut trees

Jungle swamps

Solomon Sea

Buna Mission

Buna Village

Giropa Point

SNLF

Government Garden

Coconut Grove

The Triangle

Urbana Force

Cape Endiade

Duropa Plantation

Old Strip

Repl

The Footbridge

New Strip

Warren Force

N



INTO COMBAT

Early on November 19, the Buna area was drenched by heavy rains, which prevented a planned Allied air bombardment of Japanese positions prior to the infantry attack. The 1/128th Infantry launched its attack into the Duropa Plantation at 0700hrs after a few unobserved and ineffective rounds were fired by the pair of Australian 3.7in mountain guns. Led by C/128th Infantry and carrying one day's supply of rations and ammunition, the battalion's objective was Cape Endaiadere. The Japanese were encountered about 800yd south of Cape Endaiadere. The inexperienced American troops, expecting little resistance, advanced into a nightmare. An American observer described the ensuing fight:

The enemy positions were amazingly well camouflaged, and seemed to have excellent fields of fire even in the close quarters of the jungle ... The enemy habitually allowed our troops to advance to very close range – sometimes four or five feet from a machine gun post – before opening fire; often they allowed troops to bypass them completely, opening fire then on our rear elements and on our front elements from the rear ... Our troops were pinned down everywhere by extremely effective fire. (Quoted in Milner 1989: 175)

Mortars were emplaced but, as the Americans were unable to observe Japanese positions, their fire was ineffective. Hand grenades became caught in jungle foliage and exploded harmlessly above the ground. Machine guns and rifles were fired blindly into the jungle toward locations where the men thought the Japanese might be. The Japanese fell back slowly when pressed as they were a covering force, and not the main line of resistance. By the end of the day the Americans had gained only a few yards toward Cape Endaiadere.

Attacking toward the footbridge between the two airstrips, the 3/128th Infantry ran into a worse situation. Its route to the trail junction between the airstrips was a narrow causeway with swamp on each side. The battalion had to attack through terrain featuring waist- or chest-high swamps that made the carrying of heavy weapons impossible. Some 300yd south of

The footbridge over Semi Creek, with the New Strip showing in the background. This photograph was taken after the footbridge's repair by the 32d Infantry Division's engineers. The photograph also shows the flatness of the Buna terrain and how thick the growth of *kunai* grass could be in open areas where there was neither jungle nor swamp. (US Army)





the trail junction was a clear area that the battalion tried to cross, but it was stopped in its tracks by heavy rifle and machine-gun fire from its front and right flank coming from a nearly invisible enemy. The battalion did not have its 81mm mortars, many grenades failed to explode, and supplies of .30-caliber ammunition ran low. By day's end the 3/128th Infantry was stalled at the south edge of the clearing and pinned down on a narrow front.

The November 19 fighting left the Americans shaken. They had expected to eliminate the Buna defenders quickly but instead found themselves unable to advance amid a hail of bullets. Nightfall found the Americans hungry, wet, and low on ammunition; and they noticed that the few corpses left behind by the Japanese were not those of tired, starving, diseased survivors of fighting in the Owen Stanley Mountains, but of well-fed fresh troops. American fighting prowess did not impress the Japanese, a captured Japanese diary stating: "The enemy has received almost no training. Even though we fire a shot they present a large portion of their body and look around. Their movements are very slow. At this rate they cannot make a night attack" (quoted in CG Buna Force 1943: 61). Other Japanese diarists recorded:

The enemy has been repulsed by our keen-eyed snipers. In the jungle it seems they fire at any sound due to illusion. From sundown until about 10 P.M. they fire light machine guns and throw hand grenades recklessly. They hit coconuts that are fifteen meters [49ft] from us. There are some low shots but most of them are high. They do not look out and determine their targets from the jungle. They are in the jungle firing as long as their ammunition lasts. Maybe they get more money for firing so many rounds. (Quoted in CG Buna Force 1943: 61)

This photograph was taken by a Signal Corps photographer with a 32d Infantry Division patrol near Buna. The men have crouched down and appear to be moving cautiously. The man directly in front of the photographer is carrying a Thompson submachine gun on his shoulder, leading one to conclude that this photograph might have been staged. (US Army)

The Allied right wing renewed its attack on November 20 after a brief bombardment of the Duropa Plantation and the New Strip by a few

aircraft and several rounds from the two Australian 3.7in mountain guns. C/128th Infantry attacked along the coast with B/128th Infantry on its left a few yards inland. Junior leaders, such as 1st Lieutenant John W. Crow of C/128th Infantry, led small teams to infiltrate the Japanese defenses and knock out machine guns with grenades and close-range fire. These tactics cost American lives – including that of 1st Lt Crow, who was killed charging a machine-gun position and was posthumously awarded the Distinguished Service Cross – but advanced the front several hundred yards.

The Allied left wing's attack toward Buna village fared no better. The sailors of the SNLF proved as tough as the IJA personnel on the right, and the 2/128th Infantry was stopped by machine-gun fire from hidden Japanese positions on dry ground. The presence of swamps left the Americans on a narrow strip of jungle and prevented flanking maneuvers. Although joined by the 2/126th Infantry on November 23, the Allied effort made little progress. On both wings the numbers of casualties and sick increased. With battalions of different regiments intermixed, Harding organized his troops into two groups. The troops facing Buna village were designated Urbana Force while those at the New Strip and Cape Endaiadere formed Warren Force.

By the end of November the 32d Infantry Division was at a stalemate. Despite further Allied attacks, the Japanese defensive line was still intact and the division had suffered over 400 battle casualties and many more sick:

Unhappiest of November's hard realizations was the plight of the Buna ground forces. In this, their grueling baptism of fire, they found the Japanese in perfect defensive positions ... Further, for weeks before initial contact, the Americans had fought the sapping heat, the mud, the weird night noises, the stench of the swamps, the jungle diseases. They were far from being fresh troops and were receiving no more than two lean meals per day. (CG Buna Force 1943: 17)

In addition, the division's ad hoc tactical organizations were considered a problem by higher headquarters: "Another unhappy reality was the weakening of the chain of command in the 32d Division. The terrain was, in itself, one unavoidable contributing factor, but the mixing of units could have been avoided. In some instances even platoons of different companies were under the same command" (CG Buna Force 1943: 17). Dissatisfied with the progress of the 32d Infantry Division and starting to doubt Harding's abilities, General Douglas MacArthur, Allied commander, Southwest Pacific Area, ordered Lieutenant General Robert L. Eichelberger, commanding general I Corps, to take command at Buna.

Eichelberger assumed the Buna command at 1300hrs on December 1, 1942; but with a previously planned attack across the front ready for December 2, the 32d Infantry Division was left in charge to carry it out. Eichelberger and I Corps senior staff observed this attack. On the Urbana Force's sector the attack started in the morning of December 1 with a short artillery bombardment by Australian Army 25-pdr guns and all available 60mm and 81mm mortars. E/126th Infantry moved forward, reinforced by detachments from the headquarters companies of the 2/126th and 2/128th Infantry. After reducing several SNLF bunkers, E/126th Infantry withdrew to its starting position. On December 2, observed by Eichelberger, another



artillery barrage, this time by the 25-pdr guns in conjunction with mortar fire, preceded the attack by E and H/126th Infantry plus personnel of the cannon company of the 128th Infantry Regiment serving as riflemen. This attack was halted immediately by heavy Japanese rifle and machine-gun fire.

On Warren Force's front, Harding had decided to concentrate the attack on the New Strip and cover Cape Endaiadere with B/128th Infantry. The main attack was made by A/128th Infantry and B/126th Infantry from the coast toward the eastern end of the New Strip. West of the New Strip, A/126th Infantry and I/128th Infantry attacked the bridge between the airstrips. The US infantry pulled back from their front to avoid friendly fire. Starting at 0800hrs and ending at 0815hrs, Allied aircraft bombed and strafed the New Strip and the footbridge. The target areas were hit, but the last wave of aircraft failed to drop their flares to indicate that the air attack was over, which in turn delayed the artillery and mortar barrage. The US infantry advance began at 0830hrs and was almost immediately stopped by Japanese fire. The IJA soldiers had sheltered in bunkers during the air strike and reoccupied their firing positions after it had stopped. Warren Force had not advanced; but it had suffered more casualties, including many from heat prostration in the hot, humid weather.

The attacks on December 2 led to changes in the American commanders. The Buna Force (I Corps) report noted:

The American ground attack of December-2 jumped off on schedule ... but proved abortive. The Corps Commander personally witnessed the failure of the attack in the Buna Village area, and the I Corps Assistants Chief of Staff G-2 and G-3 witnessed the unenthusiastic feint in the New Strip area ...

ABOVE LEFT

US Army 60mm M2 mortars firing at Buna. Each American rifle company included a pair of these smoothbore, muzzle-loading mortars. The M2 had a three-man crew, but required more personnel to carry its 31b shells. With a maximum range of approximately 1,940yd, its smaller size and weight made it easier to use in the jungle than the M1. (US Army)

ABOVE RIGHT

An American serviceman with a captured Type 92 air-cooled heavy machine gun. The Type 92 fired a 7.7mm round and was fed by 30-round metal ammunition strips. The strip feed slowed down the rate of fire. The weapon and tripod totaled 122lb. (George Strock/The LIFE Picture Collection via Getty Images)

Robert Eichelberger

Robert Lawrence Eichelberger (March 9, 1886–September 26, 1961) was born in Urbana, Ohio. His father wanted him to become a lawyer, but the father's law partner had been elected to Congress and offered Eichelberger an appointment to the United States Military Academy at West Point, New York. He graduated 68th of 103 graduates in the class of 1909. His classmates included the officer he later relieved at Buna, Edwin Forrest Harding. Eichelberger did not go to France during World War I. Instead he served as the intelligence officer in the American Expeditionary Force in Siberia which totaled 7,950 officers and men. While accompanying troops in the field in Siberia, Eichelberger earned the Distinguished Service Cross, the US Army's second highest award for bravery. During his Far East duties he acquired useful insights into the Japanese and the IJA.

Eichelberger was Superintendent of the United States Military Academy on December 7, 1941. In January 1942 he was assigned to command the 77th Infantry Division and in June to command I Corps. In August I Corps was sent to Australia. In December Eichelberger was sent to Buna to take over the American force. After his I Corps executed the Hollandia operation, he was sent once more to take over a stalled operation on Biak. In September 1944 he was given command of the newly formed Eighth US Army, which took over operations on Leyte in December 1944. In 1945 Eichelberger commanded the operations that liberated the Southern Philippines, being responsible for 14 major and 24 minor amphibious landings. After the Japan's surrender in August 1945, he commanded the occupation forces in Japan before retiring with the rank of lieutenant general on December 1, 1948. He died in Asheville, North Carolina, on September 26, 1961.

Lieutenant General Robert Eichelberger firing a Thompson submachine gun near Buna. Eichelberger was often in the front lines at Buna. His willingness to go to the front and share some of the dangers endured by the men under his command provided a much-needed boost to morale. Two main variants of the .45-caliber Thompson submachine gun were used by the US Army during World War II: the M1928A1 (10.8lb) and a simplified version designated the M1A1 (10lb). Both versions used a 20- or 30-round "stick" magazine. The M1A1 had a lower rate of fire, but changing magazines was easier, making the weapon more effective on the battlefield. Because of its low muzzle velocity (935 ft/sec) the Thompson was unable to penetrate most small-diameter trees found in jungle environments. (George Strock/The LIFE Picture Collection via Getty Images)

... During December 3–4 the American forces were reorganized. General Harding, Division Commander, was relieved by Brigadier General Albert W. Waldron, former Division Artillery Officer; Colonel John W. Mott, commander of the American left flank force – hereafter to be known as the Urbana Force, was relieved by Colonel John E. Grose, I Corps Inspector General; and Colonel J. Tracey Hale, Jr., commander of the American right flank force – hereafter to be known as the Warren Force, was relieved by Colonel Clarence A. Martin, I Corps G-3 ...

... Units had been badly intermixed and were reformed. On the Urbana front, the 2nd Battalion, 126th Infantry, was placed on the left and the 2nd Battalion, 128th Infantry, on the right. On the Warren front, the 3rd Battalion, 128th Infantry, was placed in the line extending from the south edge of the New Strip to the sea; and the 1st Battalion, 128th Infantry, in reserve, was placed



Adachi Hatazō

Adachi Hatazō (June 17, 1890–September 10, 1947) was born in Ishikawa Prefecture. He graduated from the Imperial Japanese Army Academy in Tokyo in 1910. Following service with the Imperial Guards he attended the Army War College in Tokyo, graduating in 1922. He served in a number of positions on the General Staff until posted to the railway guard unit of the Kwangtung Army in 1933. In 1936 he took command of the 12th Infantry Regiment. He led his troops from the front lines in Shanghai in July 1937. In September he was wounded by mortar fire during the battle of Shanghai (August–November 1937) and suffered a permanent injury to his right leg.

Promoted to major general in 1938, Adachi assumed command of the 26th Infantry Brigade and gained a reputation for sharing miserable living conditions with

his troops. He was promoted to lieutenant general in 1940 and commanded the 37th Division until becoming chief-of-staff of the North China Area Army during 1941–42. On November 9, 1942, Adachi became commander of the 18th Army, assigned to New Guinea. He oversaw the Japanese defense of Buna from Rabaul and then moved his headquarters to New Guinea.

After the war, Adachi was charged with war crimes involving mistreatment and murder of prisoners. Although he was not personally involved in these events, he insisted that he was responsible for the actions of subordinates who were. On July 12, 1947, he was sentenced to life in prison and only a few weeks later, on September 10, committed suicide while a prisoner at Rabaul.

behind the 3rd Battalion, 128th Infantry. The 1st Battalion, 126th Infantry, was reformed south of the bridge between the Old and New Air Strips. (CG Buna Force 1943: 19–20)

Reorganizing the chain of command helped to restore order and clarify commanders' responsibilities. It could not, however, alter the diminishing number of Allied soldiers. By December 10, the five battalions and regimental units of the 126th and 128th Infantry regiments totaled 169 officers and 2,017 enlisted men. On paper, five infantry battalions alone numbered over 4,500 all ranks. No infantry replacements were available and units continued to wither away due to combat and disease. The new command immediately set out to get supplies, especially hot meals, to the front-line troops. Eichelberger frequently inspected the front lines and privates found themselves being asked by their general how they were, what was working, and what was not. The men's morale improved with better supply and seeing that their senior officer cared about them and shared their dangers.

Five Bren Gun Carriers – British-designed, open-topped, thin-skinned vehicles that were intended to transport a .303-caliber Bren light machine gun and its team across open ground covered by infantry fire – arrived to support Warren Force's next attack. These carriers were neither tanks nor armored assault vehicles; unfortunately for their Australian crews, that is exactly what they were used as during

Lieutenant General Adachi Hatazō. Unlike many senior Japanese commanders, Adachi was known to welcome open discussions with his officers and staff. (US Army)





The final attacks at Buna involved the veteran Australian 18th Infantry Brigade supported by Australian-manned, American-made M3 light tanks. The M3, designated the "General Stuart," weighed 16.75 tons, was armed with a 37mm main gun and three .30-caliber Browning M1919A4 medium machine guns, and carried a crew of four men. The M3 was hopelessly undergunned and undersized against German forces after 1942, but was useful in the Pacific theater against the IJA's weak antitank capabilities. (Library of Congress, LCCN 2017696694)

Warren Force's December 5 attack. That morning, between 0820hrs and 0835hrs, Allied aircraft bombed and strafed between the Old Strip and Cape Endaiadere. At 0830hrs, artillery and mortars bombarded suspected Japanese positions. L/128th Infantry and the carriers advanced at 0842hrs. The Bren Gun Carriers became stuck in the stump-filled ground and were quickly put out of action by Japanese fire, including that of an antitank gun, and hand grenades. The Australian crews were exposed to Japanese snipers firing from concealed positions high in the surrounding trees. By nightfall, the Allied attack had ceased with no gains.

Harding had requested tank support as early as the first week of combat before his relief. His request was made because he and his senior officers believed the Duropa Plantation was suitable for using tanks – but at that time there were no Allied vessels capable of transporting tanks to the supply base at Oro Bay. By early December, however, coastal freighters capable of carrying American-made M3 light tanks became available. Tanks and their crews from the Australian 2/6th Armored Regiment were then moved to Buna Force. With Buna Force's infantry wasting away from casualties and sickness, it was reinforced with the veteran Australian 18th Infantry Brigade, commanded by Brigadier George F. Wootten.

Eichelberger placed Wootten in charge of Warren Force on December 17. At 0700hrs on December 18, the Australians attacked the Duropa Plantation with the 3/128th Infantry and 1/128th Infantry on their left flank facing the New Strip. The 1/126th Infantry attacked the footbridge between the two airstrips. By the end of the day, Cape Endaiadere was reached and a line stretched south from just west of the cape to the east end of the New Strip.

Over the next week, Yamamoto's position, which had held the 32d Infantry Division for a month, was reduced with the help of tanks. Meanwhile, Urbana Force, reinforced with the 127th Infantry Regiment, cleared the SNLF out of Buna village on the left. On January 3, 1943, organized Japanese resistance in the Buna sector ended.

Biak

June 15–July 20, 1944

BACKGROUND TO BATTLE

In March 1944, the IJA's 18th Army on eastern New Guinea, weakened by fighting against Australian forces, planned to defend the Hansa Bay–Wewak area. The army received orders that month to retreat westward to Hollandia in Dutch New Guinea, where a major base was being constructed. Before the Japanese army could move, however, American forces conducted several amphibious operations on April 22; one captured Hollandia, over 200 miles west of Wewak, and a second seized airstrips at Aitape, 50 miles west of Wewak. On May 27, as the 18th Army slowly moved west toward Aitape, American forces conducted an amphibious landing on Biak, roughly 550 miles west-northwest of the 18th Army's base. Biak had three airfields on its southern coast that the Allies wanted. On Biak, the Japanese changed their defensive measures, so that instead of repulsing attackers at the beach, they would inflict casualties for as long as possible.

The Hurricane Task Force (HTF) landed near Bosnek, 8–9 miles east of the airfields, on May 27. The HTF consisted of the 41st Infantry Division (less the 163d RCT, which rejoined the division on May 31), reinforced with two field-artillery and two antiaircraft-artillery battalions and several additional artillery batteries, a 4.2in mortar company, a medium-tank company (less one platoon), and an engineer boat and shore regiment. For airfield and base construction purposes, the HTF included three engineer aviation battalions and other miscellaneous engineer and service units. The HTF was commanded by Major General Horace H. Fuller, commanding general 41st Infantry Division. This command structure required Fuller, in addition to commanding his division in combat, to manage the establishment of the airfields and their supply base on Biak.

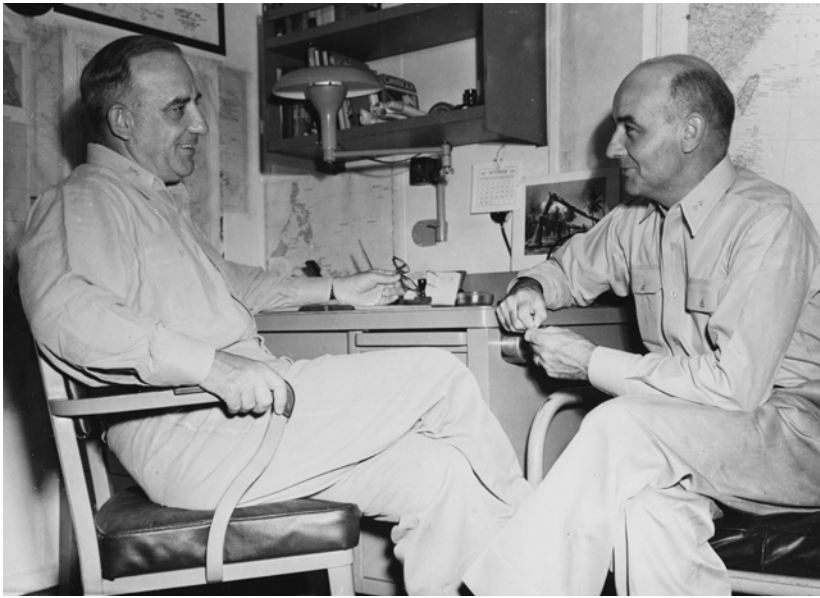
The Japanese occupied Biak in early 1942, but did not start building airbases there until late 1943. Defending Biak was the veteran 222nd Infantry Regiment, of the Ocean-type 36th Division, which arrived in December 1943. The 222nd Infantry Regiment was the division's sea-mobile regiment. Commanding the Biak Detachment was Colonel Kuzume Naoyuki, 222nd Infantry Regiment. Kuzume had approximately 3,400 men of his 222nd Infantry Regiment (minus the 5/222nd Infantry and 9/222nd Infantry, which reached Biak using barges in June); 3rd Battery, 49th Field Antiaircraft Artillery Battalion; and numerous IJA service elements, the largest of which were the 17th, 107th, and 108th Field Airdrome Construction units with about 500 men each. Also under Kuzume's control were about 1,500 IJN personnel of the 28th Naval Special Base Force and the 33rd and 105th Naval Antiaircraft units. Approximately 125 men of the Base Force's 19th Naval Guard Unit had received some ground combat training. The strength of the Biak Detachment on May 27 was some 11,400 men, including about 4,000 ground combat effectives. Kuzume armed as many of the service troops as he could.

Unable to defend the island's extensive coastline, Kuzume concentrated his defenses on high ground immediately north and northwest of Mokmer Drome. From there he could prevent Allied use of the airfields. There were three centers of resistance: the West Caves, the East Caves, and the Ibdi Pocket. The caves were ringed with pillboxes, bunkers, and foxholes. An extensive system of coral and log emplacements was built along the spur ridge above Mokmer Drome. So long as the West Caves and the positions along the ridge were occupied by the Japanese, the airfields could not be used by the Allies. The East Caves endangered Allied troop and supply movements along the coastal road from the landing beaches to the airfields. Farther east along the coastal road was the Ibdi Pocket. Caves were skillfully used as protected artillery positions: "One of the most effective stratagems employed by the forces on Biak was the emplacement of 75mm field howitzers in cave positions where they were masked from enemy observation" (Japanese Demobilization Bureaux 1994: 286).

During the fighting, the Japanese reinforced Biak using barges. About 100 men of the 5/222nd Infantry, 400 men of the II/221st Infantry, and over 500 men of the II/219th Infantry arrived between June 3 and June 16. On June 25, the 9/222nd Infantry arrived by barge. Immediately after the American landing, the Japanese assessed the situation. Lieutenant General Numata Takuzo, Chief of Staff, 2nd Area Army, commented: "The only unfavorable development at this time was a shortage of rations and, to a lesser

The US Navy submarine USS *Wahoo* (SS-238) entered Wewak Harbor on January 24, 1943 to attack Japanese shipping. Submarines attacked Japanese troop-transport and supply ships on their way to New Guinea, causing heavy losses. In early 1944, convoys carrying the 32nd and 35th divisions were battered by submarines. The 32nd Division was reduced to five infantry battalions and 1½ artillery battalions, the 35th Division to four infantry battalions and one artillery battery. The planned Japanese defense of Western New Guinea was derailed as a result of these losses. (19-N-48937 courtesy of the Naval History and Heritage Command)





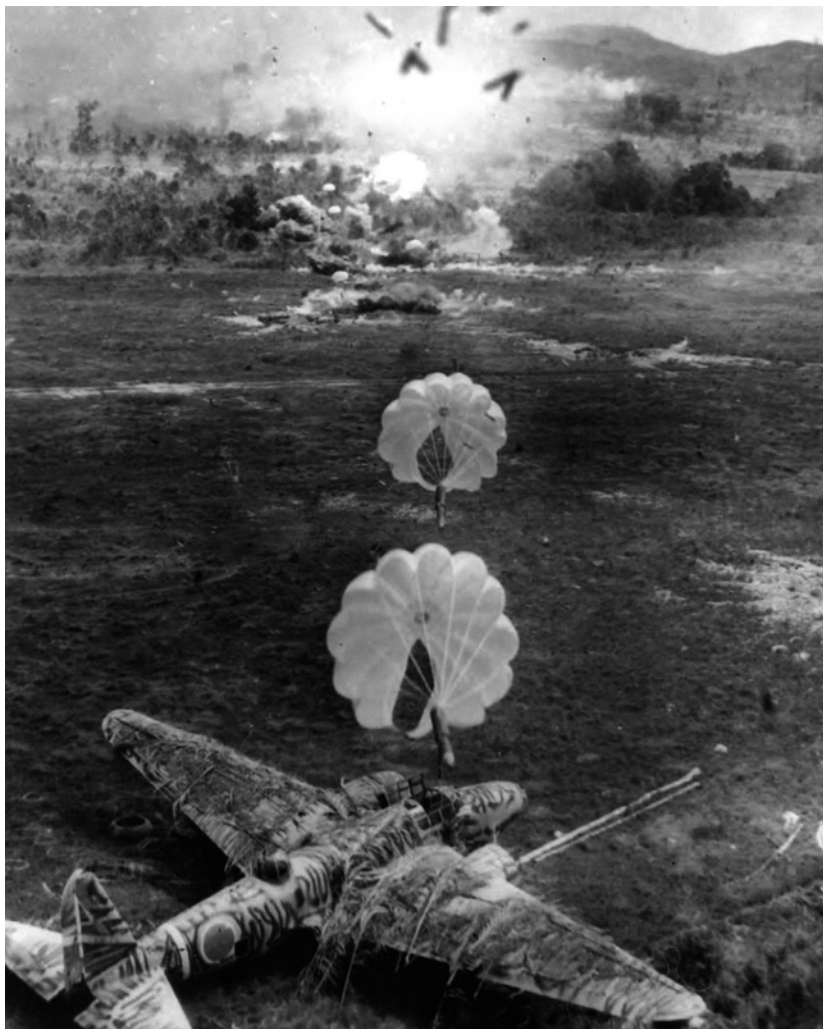
Rear Admiral Daniel E. Barbey (left), commander Seventh Amphibious Force, and his subordinate Rear Admiral Arthur D. Struble. Barbey became known as "Uncle Dan, the Amphibious Man" for his early role in developing the tools and techniques of amphibious warfare. The 1944 New Guinea operations were predicated on amphibious assaults that made it possible to bypass the Japanese 18th Army's concentration at Wewak. (80-G-301530 courtesy of the Naval History and Heritage Command)

extent, of ammunition. The rapid enemy landing in the Bosnek sector had overrun vast stocks of supplies piled near the beach preparatory to dispersal to inland dumps. The naval shelling also destroyed considerable quantities of stores" (quoted in Japanese Demobilization Bureaux 1994: 287).

After landing at Bosnek, the HTF sent the 162d Infantry Regiment to seize Mokmer Drome by advancing along the coastal road. The regiment did not, however, secure the ridges dominating its path. On May 28, the II/222nd Infantry attacked from the East Caves near Mokmer village and stopped the 162d Infantry Regiment's advance. Troops of the II/222nd Infantry and III/222nd Infantry, supported by the Japanese regiment's tanks, attacked on May 29. M4A1 medium tanks of the 603d Medium Tank Company (Separate) easily shot-up the Japanese light tanks and the infantry stopped their Japanese counterparts, but these counterattacks forced the 162d Infantry Regiment to withdraw and halted the Americans' coastal advance toward the airfields. Fuller now ordered the 186th Infantry Regiment to move west on the high ground inland to seize the airfields from the north and northeast. Between June 1 and June 6, the 186th Infantry Regiment slowly moved across the jungle-covered plateau until it reached the top of the ridges overlooking Mokmer Drome, 2,500yd to its south.

Fuller, under pressure from the Sixth US Army to capture the airfields and make them operational, ordered the 186th Infantry Regiment to attack and secure the airfields, especially Mokmer Drome, on June 7: "The regimental commander objected for he considered it of vital importance to seize the dominating terrain north and north east of the airfield before making any attempt to seize the strip. He was overruled" (Lawless 1953b: 53). The attack began at 0730hrs on June 7: "By 0850, two battalions had crossed the airfield and reached the beach, having encountered no resistance on the way. Before noon, every man was inside the perimeter on the beach! It was so ridiculously easy as to indicate that something must be wrong ..." (Lawless 1953b: 53). The "something" was the fact that the main Japanese defenses had been bypassed.

By March 1944 the Japanese had concentrated over 300 aircraft at airfields around Hollandia to resist the expected Allied advance along the northern coast of New Guinea. Beginning on March 30, the Allied air forces launched a series of surprise air strikes against these airfields, including use of parachute fragmentation bombs. By April 3, some 300 Japanese aircraft had been destroyed, mainly on the ground. Only 25 were operational by April 6. The Allies now controlled the skies, allowing the amphibious leaps to Aitape and Hollandia on the New Guinea coast. (US Army)



Landing craft approaching the island of Biak on May 27, 1944. One should note that on this day, while a reinforced division was landing on Biak, the United States had 3½ US Marine Corps divisions, two US Army divisions, and two sets of corps troops preparing to invade the Mariana Islands in the Central Pacific. Simultaneously, half a world away, the Allies were preparing to launch the massive D-Day invasion of Normandy. In 1942 the Japanese and Germans could not have imagined that by summer 1944 the "Grand Alliance" would have the amphibious capability to move the equivalent of an entire army group. (80-G-240376 courtesy of the Naval History and Heritage Command)

Once the Americans were on Mokmer Drome, the Japanese emerged from hiding and cut the land route behind the 186th Infantry Regiment, which would now have to be supplied from the sea. From their positions, the troops of the Biak Detachment employed artillery, mortar, and automatic weapons fire to prevent Allied use of the airfields.

The 186th Infantry Regiment made several unsuccessful efforts to link up with the 162d Infantry Regiment to the east at Ibdì during June 8–10. Japanese fire from the East Caves stopped the 186th Infantry Regiment from moving eastward. Japanese forces in the Ibdì Pocket continued to prevent the





Japanese defenses on Biak included dual-purpose guns capable of engaging both aircraft and surface targets. This gun, emplaced near Bosnik on Biak, was captured during the initial landing by the 41st Infantry Division. Pre-landing naval bombardment either damaged the gun or caused the crew to abandon it. In the background are LSTs delivering follow-on men, weapons, and supplies for the Hurricane Task Force. (© CORBIS/Corbis via Getty Images)

162d Infantry Regiment from advancing westward. US engineers attempting to repair Mokmer Drome were prevented from working by fire from the West Caves and adjacent positions. All that was accomplished by the Americans was confirmation that the Biak Detachment held strong positions in the coral ridges and was determined to stand and fight. The HTF moved the 162d Infantry Regiment by water to join the 186th Infantry Regiment at Mokmer Drome. Beginning on June 11, the two regiments attempted to drive the Japanese out of their positions overlooking the airfields. By June 15, the two regiments had not reached their objectives, but had reached the rim of the West Caves, which were now recognized as a significant Japanese position.

The Biak operation was to secure the airfields for use by very long-range aircraft to support the June 15 invasion of the Mariana Islands in the Central Pacific. A major Japanese naval response to the Mariana Islands invasion was expected and Biak-based aircraft were intended to help locate Japanese task forces. The delay in getting the airfields operational had caused the Sixth US Army to send observers to Biak, who reported "a lack of determination especially at the battalion and company levels; ineffective reconnaissance; and a reluctance by the staff to visit the front lines" (quoted in Lawless 1953b: 54).

As at Buna, the Americans turned to Lieutenant General Eichelberger and his I Corps staff to solve the battlefield problem. The Sixth US Army intended I Corps to take command of the HTF, thereby allowing Fuller to concentrate on his division. Fuller interpreted the change as a sign of "no confidence" and resigned. The assistant divisional commander, Brigadier General Jens A. Doe, replaced Fuller as commanding general 41st Infantry Division.

Mokmer Drome under air attack. The coral ridges rising above the airfield can be seen. The plateau-like area above the first terraces is where the West Caves complex was located. The importance of the ridge-cave positions to deny use of the airfield is easy to understand. (US Army)



Biak, June 15–July 20, 1944

MAP KEY

1 1230hrs, June 15: Lieutenant General Eichelberger and I Corps assume command of the Hurricane Task Force on Biak.

2 June 17: Eichelberger observes the 41st Infantry Division's previously planned June 17 attack against the West Caves from a position on high ground overlooking Mokmer Drome. Dissatisfied with the action, Eichelberger calls off all attacks for June 18 and directs a reorganization and redispersions for a systematic attack by both the 162d and 186th Infantry regiments on June 19.

3 1040hrs, June 19: The 2/186th Infantry advances west and north of the West Caves, to isolate the caves. The 3/186th Infantry initially follows in reserve, 500yd to the rear. During the 186th Infantry Regiment's attack, the 162d Infantry Regiment carries out frontal attacks against the West Caves' entrances.

4 1200hrs, June 19: The 1/186th Infantry advances from positions north of the West Caves and links up with the rest of the regiment. By nightfall the West Caves are nearly surrounded.

5 c.0800hrs, June 20: The 186th Infantry Regiment clears the ground northwest of the West Caves while the 162d Infantry Regiment attacks the caves. Heavy fire prevents the 162d Infantry Regiment from reaching the caves' entrances.

6 c.1800hrs, June 20: The 3/163d Infantry secures positions on top of the coral ridge for observers overlooking the Japanese positions.

7 Night, June 20/21: Small parties of Japanese conduct harassing attacks against the 162d Infantry Regiment

and others probe the 186th Infantry Regiment's positions northwest of the caves. The Japanese also shell Mokmer Drome. At dawn the Japanese withdraw into the caves.

8 June 21: During the day the 1/162d Infantry attacks the West Caves with flamethrowers supported by M4A1 medium tanks. The entrance itself is shielded by coral outcroppings that prevent effective firing into the cave. Stalled at the entrance, the US battalion pulls back to the positions it held the night before.

9 June 21: Advance elements of the II/219th Infantry arrive and take up defensive positions on the coral ridges northwest of the Americans. This Japanese battalion has arrived too late to have an impact on the fighting around the West Caves.

10 2100hrs, June 21: Japanese parties from the caves attack northwest against the 186th Infantry Regiment using rifles, light machine guns, and grenade dischargers. A second Japanese attack is made around 0000hrs, June 22, and a third at 0400hrs. These attacks occur during a withdrawal from the West Caves. Of 150 Japanese who try to escape, 45 make it through the 186th Infantry Regiment's lines.

11 June 22: An unknown number of Japanese remain in the West Caves. Engineers lower two 500lb demolition charges into one of the entrances and electronically detonate them. American patrols do not enter the cave until June 25 and the complex is fully explored by June 27.

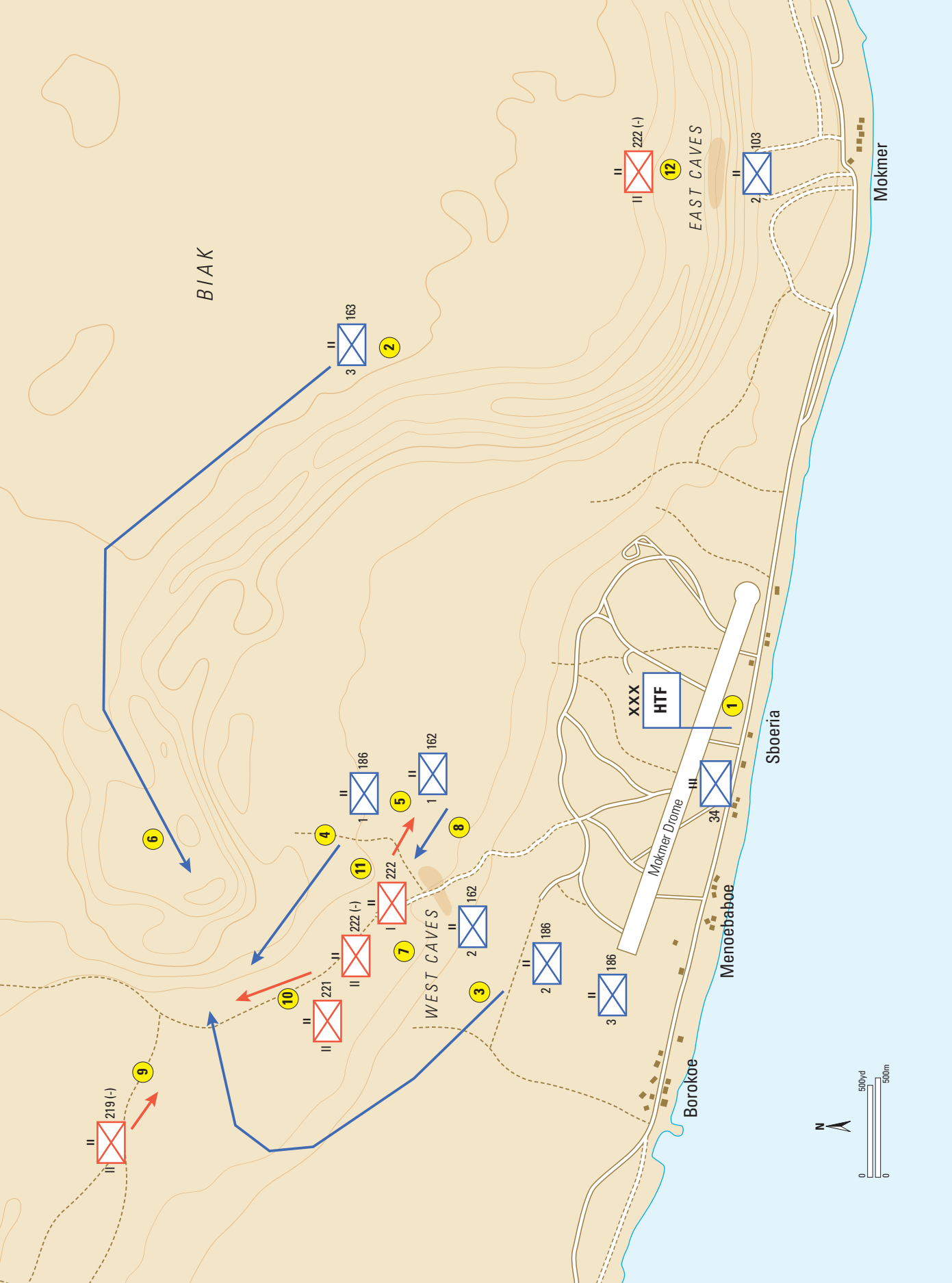
12 July 20: The East Caves complex is secured. Japanese troops in this position are relatively passive during the fighting around the West Caves in June and retreat inland during early July.

Battlefield environment

Biak is located in the Schouten Island group north of Geelvink Bay. The island is approximately 1° south of the equator and has an area of 674 square miles. It has a tropical rainforest climate: the average daily high temperature is 86.3°F, with monthly rainfall in June of 8.5in. Fighting on Biak occurred in a small area on the southern coast where the Japanese had built three airfields on a coastal plain. The most easterly of the three airfields was Mokmer Drome (near the village of Mokmer). Sorido Drome lay 2½ miles to the west. These two airfields were near the southern coast. Borokoe Drome was located ¾ mile inland between Mokmer and Sorido dromes. Another airfield had been surveyed north of Bosnek.

Inland of the three existing airfields were steep, elevated, coral and limestone terraces and cliffs rising step-like to the inland plateau. Within these terraces and cliffs were countless

caves, many of which were interconnected by fissures and tunnels. These caves were significant to the Japanese defenses and were of four general types: simple cavity caves, tunnels, galleries, and sumps. Sumps were on ridges north of the coastal plain and were circular holes with sheer sides, up to 300ft in diameter and 75ft deep. One or more caves opened at the base of the sides or from small pits in the bottom. About 1,200yd north of the western end of Mokmer Drome were three large sumps connected by tunnels that were called the West Caves. North of Mokmer village, 180ft high on the main coral ridge, were two more sump complexes called the East Caves. From these two cave complexes Japanese firepower denied American forces the use of the airfields. Farther east along the coastal road was another position called the Ildi Pocket, consisting of pillboxes, small caves and crevices, and foxholes.



INTO COMBAT

Eichelberger allowed the 41st Infantry Division to carry out its planned June 17 attack. He observed the attack from a position on high ground overlooking Mokmer Drome. Dissatisfied with the action, Eichelberger called off all attacks for June 18 and directed reorganization and redispersions for a systematic attack by the 162d and 186th Infantry regiments on June 19. The plan called for:

41st Division, less 163rd Infantry (less 3rd Bn) and 146th FA Bn (Corps Reserve), with the 34th Infantry attached, will launch a limited objective attack Monday, 19 June 1944, enveloping the enemy right (south) flank, ... in order to secure MOKMER Drome from enemy fire. The ridge 1000 yards east of BOROKOE Drome will be occupied for the purpose of protecting the north flank in a future operation. Time of attack 0630K. (41st Infantry Division 1944: 33)

The 34th Infantry Regiment could not be used without I Corps' approval. Supporting the infantry were two battalions of 105mm howitzers, two battalions of 155mm howitzers, one company of 4.2in mortars, and one medium-tank company (less one platoon) with ten M4A1 tanks. This attack was intended to drive the Japanese from their positions overlooking Mokmer Drome and secure an area about 1,000yd long and some 500yd wide running southeast to northwest.

Biak Detachment was now deployed in three groups: one centered on the West Caves and the low ridges to the north-northwest, with the I/222nd Infantry, part of the II/222nd Infantry, the II/221st Infantry (on the ridges northwest of the caves), artillery, antiaircraft artillery, and construction troops; a second group at the East Caves, held by the rest of the II/222nd Infantry, naval personnel, and construction troops; and a third group, containing most of the III/222nd Infantry, in the Ibdi Pocket. Eichelberger's attack would fall on the Japanese in and around the West Caves position while screening the East Caves and Ibdi Pocket.

The 2/186th Infantry and 3/186th Infantry assembled at an egg-shaped hill about 1,900yd north-northwest of the West Caves by 0900hrs on June 19. Because the terrain was rough and overgrown, however, the American troops required more time than expected to reach their line of departure. The soldiers of the 162d Infantry Regiment had remained in the positions they held near the West Caves and during the attack by the 186th Infantry Regiment they were to conduct frontal attacks against the sump-hole entrances. After the artillery preparation had ended at 1040hrs, the 2/186th Infantry advanced eastward, west and north of the West Caves, while the 3/186th Infantry was held in reserve 500yd to the rear.

The 2/186th Infantry advanced with F/186th Infantry on the left (followed by G/186th Infantry) and E/186th Infantry on the right. After overcoming scattered Japanese resistance, F/186th Infantry reached a vehicular road that ran northwest along the base of a rugged coral ridge northwest of the West Caves by 1105hrs. They were joined shortly by E/186th Infantry. After catching their breath and rearranging platoons and squads, the two companies moved on to capture the ground overlooking the road to the northeast.



One of the two entrances to the West Caves complex overlooking Mokmer Drome on Biak. Japanese fire from within the West Caves prevented American engineers from making the airfield operational. Japanese artillery pieces were pulled into the caves during the day and brought out at night to shell Mokmer Drome. The coral ridges on Biak provided the Japanese with natural bunkers that were impervious to air and artillery bombardment. (US Army)

Despite resistance from elements of the II/221st Infantry and antiaircraft guns used as field artillery, the objective was secured by 1130hrs and the Japanese road was cut. The 3/186th Infantry joined the 2/186th Infantry and both battalions dug in.

Around noon, the 1/186th Infantry advanced from its positions north of the West Caves and linked up with the rest of the regiment by late afternoon. This advance encountered scattered light resistance, mostly from hastily armed laborers and service troops (among them men of the 107th Field Airdrome Construction Unit), while most of the trained Japanese infantry remained in their coral defenses. As night fell on June 19, Japanese personnel in the West Caves were nearly surrounded by the 186th Infantry Regiment to the west and northwest, the 162d Infantry Regiment to the north, east, and south sides of the caves, and by the 3/163d Infantry on the coral terraces overlooking the caves. The HTF could now set out to reduce the West Caves and secure the three airfields. Eichelberger's orders for June 20 were for the 186th Infantry Regiment to clear the ground to the northwest of the West Caves and prevent Japanese reinforcement or retreat, for the 3/163d Infantry to continue securing the coral terraces, and for the 162d Infantry Regiment to eliminate the defenders of the West Caves. The 163d Infantry Regiment (less the 3/163d Infantry) was to contain the Japanese at the East Caves and Ildi Pocket.

On the morning of June 20, the 1/162d Infantry, supported by two M4A1 medium tanks, moved toward the West Caves. Although little opposition came from the high ground north and northwest of the caves, because the 186th Infantry Regiment had cleared that area the day before, heavy rifle and machine-gun fire came from the caves themselves and positions around them. This prevented the American troops from getting into the sumps and reaching the cave openings. To reduce the defenses, gasoline-filled 55-gallon drums were rolled into some cave entrances and ignited in an attempt to burn out the defenders. Despite these fires, the Japanese maintained defenders throughout the day who showed no sign of weakening. Before nightfall, unable to secure the cave entrances, the 1/162d Infantry fell back to the positions it had held at daybreak. A postwar Japanese account written for the US Army described the situation:





Biak, June 20, 1944

On the morning of June 20, the 1/162d Infantry, supported by two M4A1 tanks from the 603d Medium Tank Company (Separate), attacked the West Caves complex from the east. This area had been shelled and bombed for several weeks; trees are shattered, vegetation is torn up, and there are bomb and shell craters. This has become a rough "moonscape" of coral. The entrances to the caves are located at the bottom of a depression in the coral surface called a sump. Some Japanese are firing from positions in and around the cave entrance. The sump has steep sides, in some places nearly vertical. Other Japanese are fighting from slightly higher ground west of the

sump. Near noon, an M4A1 medium tank approaches the edge of the sump. Accompanying the tank is a reduced rifle squad. One scout is falling back to shelter behind the tank from the enemy fire. The squad leader, with a Thompson submachine gun, is immediately behind the tank, trying to sort out his squad. The BAR man is to his left and four M1-equipped riflemen are cautiously following. On Biak a new form of defense was encountered by the Americans. Rather than trying to drive the attackers back into the sea, the Japanese would defend positions to the bitter end, seeking to inflict as many casualties as possible on the Americans.

The American force's sole trouble after the capture of the high ground north of the airfield was the West Cave Sector. Since the arrival of the new commander [Eichelberger], the enemy had been diligently trying to locate the harassing caves. A series of attacks against the West Cave Sector was started about the 20th, but it seems that cave defenders repulsed the assault at least on the 20th. This should give us an idea of how hard the BIAK Garrison fought in this last ditch struggle. The general situation, however, was definitely unfavorable. (First Demobilization Bureau 1950: 36)

The situation at the West Caves had started to become dire for the Japanese:

About 20 June, the detachment commander, who became conscious of the imminent fall of the West Cave, had the cloth portion of the Regimental colors committed to the flames. He took this step in preparations for a "banzai" charge. In setting fire to the standard, care was taken to keep its three specific parts off the flames; the Imperial crest of chrysanthemum, the staff and a small portion of the tassel. The tassel parts, thus saved, were to be distributed to each battalion, but, in fact, they were given only to the 1st Battalion. (First Demobilization Bureau 1950: 36)

During the night of June 20/21, small parties of Japanese moved out of the West Caves and conducted harassing attacks against the 1/162d Infantry. Other parties probed the positions of the 186th Infantry Regiment to the northwest of the caves. The Japanese also shelled Mokmer Drome with mortars and light artillery, probably 70mm battalion guns. By dawn, survivors of the harassing parties withdrew into the caves and the mortars and artillery were hidden. The Americans still had to clear the West Caves.

On June 21, the 1/162d Infantry once again advanced upon the West Caves. Flamethrower teams with rifle squads attacked to drive Japanese troops off the ground to the north and northwest. Supported by two M4A1 medium tanks, the majority of the battalion's personnel encircled the West Caves. Then attacks by infantry/tank teams were made against the western sump hole of the cave complex. While tanks fired into cave entrances, the infantry threw

hand grenades into any hole and crevice they located. Rifle fire killed or wounded any Japanese soldier who was exposed. The cave entrances themselves were shielded by coral outcroppings that prevented effective firing into them. Next the Americans brought in combat engineers, who poured drums of gasoline into the West Caves complex into crevices and holes found on the surface above that led into the caves. The gasoline was ignited by flamethrowers, but no results were observed and Japanese fire continued unabated. The men of the 1/162d Infantry made no attempt to enter the caves. Stalled at the entrance, the battalion pulled back to the positions it held the night before.



During the night of June 21/22, the Japanese attacked out of the West Caves complex. Heavy attacks were made to the northwest against the 186th Infantry Regiment by riflemen supported by light machine guns and grenade dischargers. Two attacks were made, one at 2100hrs and a second around 0000hrs on June 22. Both were repulsed by .30-caliber and .50-caliber machine guns and 60mm mortar fire at close range (55yd). At 0400hrs the Japanese attacked again, quietly crawling up to the American foxholes and using bayonets and hand grenades. This resulted in hand-to-hand combat and close-range firing during which the men of the 186th Infantry Regiment repulsed the Japanese. The 1/162d Infantry was also attacked by small groups of Japanese using rifles and hand grenades, but these small attacking parties were easily repelled. The 186th Infantry Regiment suffered one dead and five wounded and counted 115 Japanese dead on the morning of June 22. The 1/162d Infantry had no losses and counted 17 Japanese bodies. A postwar Japanese account described the events of June 21/22:

This Japanese Type 95 Ha-Gō light tank has been knocked out by an American M4A1 medium tank. The Type 95 weighed about 9 tons, carried three crewmen, and was armed with a 37mm main gun and two 7.7mm-caliber machine guns. On Biak, a Japanese attack supported by these tanks during the morning of May 29, 1944 resulted in the first, and only, tank battle of the New Guinea campaign. (US Army)

About the 21st, the West Cave was completely besieged by the enemy force which attacked the inside of the cave with tank guns, flame throwers, ignited drums, and so forth. Our units defending the cave struck at once against the assaulter and fought resolutely in the face of death ... The Detachment Commander seemed to have decided eventually the launching of “banzai” charge in the desperate fighting. Just then the radio section reported that the Nisihara Battalion [the II/219th Infantry] would arrive as reinforcements. Also there were several senior officers who tried to reverse the decision of the commander to launch a “banzai” charge ... Finally, the detachment commander changed his mind and decided to escape from the besieged West Cave under cover of darkness on the 22nd ... about 130 soldiers, too seriously wounded to walk alone, committed suicide to make it easier for the main strength of the detachment to get out of the cave. Convinced that the Empire would ultimately win, they killed themselves with a smile ... During the escape, the detachment commander was accompanied only by a total of about 150 men including 50 regimental headquarters personnel, 40 signal troops and 40 from the 1st Battalion. Their arms consisted of only rifles and grenade throwers. (First Demobilization Bureau 1950: 36–37)

About 45 Japanese troops reached the new position. An undetermined number of Japanese remained in the West Caves. On June 22, American engineers lowered two 500lb demolition charges into one of the cave entrances and electronically detonated them. Some Japanese ran out of the cave and were shot. Another group waited until night had fallen and tried to escape past the Americans. A perimeter was formed around the cave entrances. American patrols did not enter the cave until June 25 and the West Caves complex was fully explored by June 27. The Japanese reported:

The efforts exerted by remnants of the Japanese forces shifted from the West Cave perimeter to the north of it. It is true that those Japanese survivors, exhausted and outnumbered, failed to offer a resistance worthy of note. But they still had a fighting spirit and continued to resist the enemy, while falling back step by step.

... In this situation, the detachment commander made up his mind to commit suicide ... he calmly killed himself ... in this way sharing the fate of the airfield which he had been directed to hold as the nucleus of the defenses on Biak Island. (First Demobilization Bureau 1950: 38)

Biak's three airfields were now secured and American engineers could safely work on them. The engineer battalions quickly repaired and expanded the airfields, bringing them up to operational condition. The 41st Infantry Division established a defense perimeter on the south shore of Biak to protect the airfields and newly constructed base. The remainder of the island was frequently patrolled by American troops and the surviving Japanese were either killed or managed to escape from the island.

The 41st Infantry Division's foot soldiers finally eliminated Japanese resistance through hard fighting with the support of M4A1 medium tanks. Infantry platoons would team with one or more tanks and advance upon the Japanese positions. The tanks' 75mm main gun and three machine guns engaged the enemy and covered the infantry as they approached defenses. At night the infantry protected the tanks from Japanese infiltrators attempting to destroy them using demolition charges. (US Army)



The Driniumor River

July 10–August 4, 1944

BACKGROUND TO BATTLE

Isolated by the American capture of Hollandia and the Aitape airstrips on April 22, 1944, the 18th Army assessed its situation in early May:

The idle soldiers on isolated islands could do nothing in regards to the expectations of the national army if they remained at Wewak disregarded by the enemy. They then determined to recapture Hollandia with their tired troops and planned to assemble their strength east of the Sepik Rivers at Wewak. Their first objective was to destroy the enemy at Aitape and began preparations to that effect. (First Demobilization Bureau 1948: III.57)

The 18th Army ordered the 20th and 41st divisions and the 66th Infantry Regiment (51st Division) to attack Aitape. The Japanese attacked with approximately 20,000 men (8,000 infantry, 2,500 artillery, 5,000 porters, and 4,500 headquarters and service personnel). Some 15,000 men carried supplies, and 20,000 men, including sick and wounded, defended Wewak. The 18th Army's field artillery consisted of 36 75mm mountain guns, 19 75mm regimental guns, and 23 70mm battalion guns, but not all were used in the attack. The 18th Army's supplies were inadequate. In the absence of roads, supplies were carried by porters and coastal barges; but the barges were attacked by aircraft and US Navy PT boats, making water transport next to impossible for the Japanese. Soldiers were on half-rations, which were exhausted by mid-August. Small-arms ammunition supply was only half the amount normally allocated and artillery shells were scarce.

The American force defending the airstrips at Aitape was designated the Persecution Task Force (PTF) which, by late May, was built around the



US Navy PT boats marshaled near New Guinea in 1944. Originally intended for attacking large ships with their torpedoes, PT boats quickly found that their biggest role off New Guinea and the Solomon Islands was attacking Japanese motorized barges: this was called "barge busting". Because the motorized barges were frequently armed with guns up to 37mm, the PT boats were quickly up-gunned with 20mm, 37mm, and 40mm guns. Some PT boats had their torpedo tubes removed to reduce weight and thereby permit the fitting of more guns. (SC 189625 courtesy of the Naval History and Heritage Command)

32d Infantry Division under Major General William H. Gill. During May, Allied intelligence detected the 18th Army's westward movements. In early June, a combination of patrol reports, captured documents, and intercepted communications led to the conclusion that a Japanese attack was planned. The PTF was reinforced with the following units: the separate 112th Cavalry Regiment (Texas National Guard), which arrived June 27; the 124th RCT (31st Infantry Division – Alabama, Florida, Louisiana, and Mississippi National Guards), which arrived July 3–6; and the 43d Infantry Division (Connecticut, Maine, Rhode Island, and Vermont National Guards), which arrived July 15–17. Command of the enlarged PTF was assigned to XI Corps under Major General Charles P. Hall.

The PTF built a perimeter around the airstrips at Aitape and placed a covering force along the Driniumor River, roughly 20 miles to the east. The covering force was designated the Persecution Covering Force (PCF) on July 8 and was commanded by Brigadier General Clarence A. Martin, the 32d Infantry Division's assistant commander. On July 10 the PCF included the 128th Infantry Regiment (less the 3/128th Infantry), the 3/127th Infantry, and Brigadier General Julian W. Cunningham's 112th Cavalry RCT. Defending the Aitape perimeter was the rest of the 32d Infantry Division and the 124th RCT (from the 31st Infantry Division). The battle was fought by the PCF under XI Corps' general direction using individual infantry battalions rotated in from regiments in the PTF. Infantry regimental headquarters were used to command task forces, while their cannon and antitank companies were frequently used as supply carriers or provisional rifle companies.

At its peak, the PCF controlled 11 infantry battalions and two dismounted cavalry squadrons. Artillery support for the PCF was initially provided by the



105mm howitzers of the 120th and 129th Field Artillery battalions, deployed near the coast. Company B, 632d Tank Destroyer Battalion (Self Propelled), equipped with M10 Hellcat tank destroyers, was deployed at the mouth of the Driniumor River. Air support for the PTF was provided by No. 71 Wing RAAF with three squadrons of Bristol Beaufighter long-range heavy fighters and Bristol Beaufort medium bombers based at Aitape. These RAAF aircraft were reinforced by USAAF bombers based at Nadzab and Hollandia. C-47 Skytrain transports flew from these bases, airdropping supplies to PCF units in the jungle.

On July 9 the PCF consisted of the 1/128th Infantry, the 2/128th Infantry, the 3/127th Infantry, and the 112th Cavalry Regiment. On July 10 Hall directed the PCF to execute a reconnaissance in force on the east side of the Driniumor River. The 1/128th Infantry advanced along the coast while the 2/112th Cavalry advanced through the jungle east of Afua. The 1/128th Infantry moved roughly 3 miles east until it encountered heavy resistance and stopped. Dense jungle slowed the eastward movement of the 2/112th Cavalry, which moved only about 1 mile east before digging in for the night. These movements left two infantry battalions and one dismounted cavalry squadron to defend the river line. The 2/128th Infantry had to cover some 6,000yd of the front, the 3/127th Infantry covered 2,500yd, and the 1/112th Cavalry held 3,000yd.

The 112th Cavalry Regiment, under Colonel Alexander M. Miller, was the primary unit of the 112th Cavalry RCT commanded by Cunningham. Roughly half the size of an infantry regiment, Miller's command had two squadrons, each authorized 521 officers and men, organized into three rifle troops but with no heavy-weapons troop. The regiment had a single heavy-weapons troop but did not have cannon or antitank companies. Understrength after previous combat, the regiment was fewer than 1,500 strong but had a strong sense of pride. Some of the Texas National Guard members had five or more years of service in the regiment. New draftees, many of them non-Texans, were organized around the Texas core and quickly absorbed the regiment's ethos. They became cavalrymen first and foremost, even if they had never ridden a horse. Being leaders of a small unit, the regiment's officers frequently knew the first names of their men. This resulted in an regiment with a high degree of cohesion, pride, and confidence. The Japanese found the 112th Cavalry Regiment a tough opponent.

ABOVE LEFT

Bristol Beaufort medium bombers of the RAAF provided air support to the Persecution Task Force during the Driniumor River fighting. Pictured in October 1941, this example was the first to be made in New South Wales, Australia. No. 71 Wing RAAF was stationed at Aitape with two squadrons of Beauforts and one squadron of its Beaufighter long-range heavy fighter variant. The RAAF provided interdiction of the Japanese 18th Army's meager supply lines and attacked enemy targets in the jungle. (Norman E Brown/Fairfax Media via Getty Images)

ABOVE RIGHT

HMAS *Australia* provided gunfire support at Biak, the Driniumor River, and other operations along the New Guinea coast. HMAS *Australia* was a British-built heavy cruiser with a displacement of 10,000 tons and armed with eight BL 8in Mk VIII guns in four twin turrets. HMAS *Australia* and HMAS *Shropshire* provided the heaviest guns in the SWPA naval force. During the Driniumor River battle the two Royal Australian Navy heavy cruisers shelled Japanese headquarters, supply dumps, troop concentrations, and lines of communications. (80-G-78946 courtesy of the Naval History and Heritage Command)

The Driniumor River, July 10–August 4, 1944

MAP KEY

- 1 2350hrs, July 10:** Japanese 75mm guns start shelling the 2/128th Infantry's positions. This is followed by massed infantry attacks across the Driniumor River by the I/78th Infantry, III/78th Infantry, and elements of the 80th Infantry Regiment; the 237th Infantry Regiment crosses the river on a 100yd front in a column of battalions led by the I/237th Infantry.
- 2 0400hrs, July 11:** Fighting dies down along the river. The Japanese have broken through the 2/128th Infantry and crossed to the western side of the river. US infantry and artillery fire inflicts heavy losses on the attackers both in men and crew-served weapons.
- 3 Morning, July 11:** The PCF is ordered to retreat to the second-line position along the "X-ray" river. The 2/112th Cavalry withdraws west and joins the rest of the regiment.
- 4 July 12:** The PCF is reinforced with the 124th Infantry Regiment and ordered to drive the Japanese back east of the river.
- 5 0800hrs, July 13:** The American counterattack begins in the south as the 112th Cavalry Regiment, led by B/112th Cavalry, moves east.
- 6 c.1100hrs, July 13:** B/112th Cavalry encounters a company-sized force of the Japanese 20th Division. Dense vegetation limits visibility to a few yards; artillery fire is called in on the Japanese force.
- 7 1530hrs, July 13:** The 112th Cavalry Regiment reaches Afua and reoccupies its positions along the river.
- 8 c.1930hrs, July 18:** The III/78th Infantry and II/80th Infantry attack A/112th Cavalry at Afua from the south and west. After two hours of fighting, A/112th Cavalry retreats about 250yd northeast.
- 9 c.0700hrs, July 19:** A composite force of three rifle platoons from the 1/112th Cavalry and the 3/127th Infantry retakes A/112th Cavalry's former position against little Japanese resistance. American troops advance 600yd southwest of the position.
- 10 1645hrs, July 21:** The 79th Infantry Regiment attacks the 1/112th Cavalry at Afua and is soon joined by the 78th and 80th Infantry regiments attacking from the northwest. The Japanese attack breaks down under artillery fire, but isolates C/112th Cavalry.
- 11 1000hrs, July 25:** C/112th Cavalry evacuates its position and moves through the Japanese lines to rejoin its parent regiment.
- 12 0620hrs, August 1:** The 20th Division (with the 66th and 237th Infantry regiments attached) and the 41st Division (minus the 237th Infantry Regiment and the I/239th Infantry) – about 3,750 Japanese troops in total – attacks the 1/112th Cavalry. Malnourished, sick, and lacking both support weapons and ammunition, the attackers are cut down by the defenders' firepower. Another Japanese attack is made the following day.
- 13 0615hrs, August 4:** A final Japanese attack sees the remnants of the 41st Division charge into the defensive fires of the 1/112th Cavalry. After two hours the Japanese are stopped. The 18th Army now retreats eastward toward Wewak.

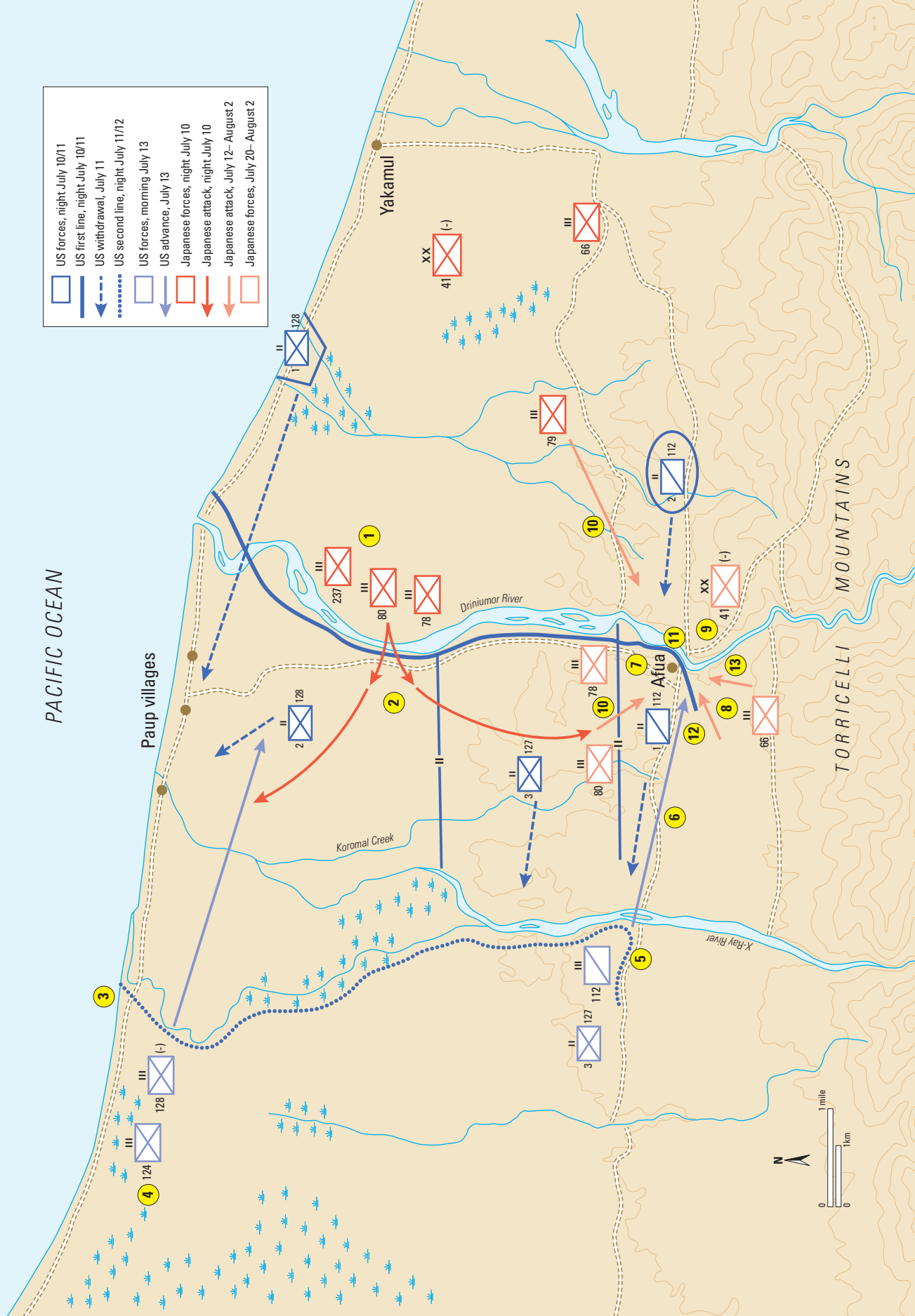
Battlefield environment

The Aitape area is a narrow coastal plain, bordered to the north by the Pacific Ocean and to the south by the Torricelli Mountains. The plain is covered by rainforest and many swamps. The roads are confined to the coast, with only foot trails inland. In 1944, movement was difficult and mechanical transport could not be used when moving inland. The difficulty of transport meant that supplies had to be man-carried or, for the Americans, airdropped from transport aircraft.

Streams and rivers run north from the mountains to the ocean. The Driniumor River is one of six main rivers on New Guinea. It originates in the Torricelli Mountains, flows through the range's foothills, and enters the plain at the village of Afua, on the west bank of the Driniumor, which featured prominently

in the fighting involving the 112th Cavalry Regiment. From Afua to the coast the Driniumor follows a twisting path that is roughly 12,000yd long. In 1944, the normal depth of the river was 3ft with a width of 40yd, but its width and depth can vary greatly based on the amount of rainfall. In July and August, tropical downpours occur frequently. Rainwater runs off quickly in the mountains, causing the Driniumor (and other streams) to rise rapidly in the coastal plain.

Aitape is little more than 3° south of the equator, resulting in both high temperatures and high relative humidity. The resulting heat indices are high, which made marching and fighting extremely exhausting. Fog generally does not occur near the coast, but does occur in valleys and near rivers during mornings.



INTO COMBAT

The 18th Army planned a narrow frontal attack by the 78th and 80th Infantry regiments (20th Division) and the 237th Infantry Regiment (41st Division), but instead made a series of separate attacks. Japanese 75mm guns began shelling American positions at 2350hrs, July 10. The I/78th Infantry started crossing the Driniumor River at 2355hrs and attacked positions held by G/128th Infantry, which held a 1,000yd sector with machine-gun and rifle positions 60–70yd apart. The Japanese infantry battalion's personnel were in poor physical shape and expected an easy crossing of the river. They carried their four heavy machine guns and single 70mm infantry gun instead of using them for support. Surprised by the Americans' resistance and the presence of barbed wire in front of the perimeter, the Japanese charged in three waves. The charges were met by fire from rifles, automatic weapons, and mortars, as well as grenades thrown. This close-range defensive fire was supplemented by the 105mm howitzers of the 120th and 129th Field Artillery battalions firing preplanned defensive barrages. The I/78th Infantry lost three-quarters of its strength during this attack and its heavy machine guns and infantry gun were destroyed.

Around 0015hrs on July 11, 1st Platoon, E/128th Infantry (on G/128th Infantry's northern flank) was attacked by the III/78th Infantry and elements of the 80th Infantry Regiment. E/128th Infantry held a 1,250yd front. Again, American firepower inflicted heavy casualties on the Japanese infantry. Despite the losses, the III/78th Infantry managed to advance through gaps between the Americans' firing positions and establish a bridgehead on the west bank of the river. The remainder of the 78th Infantry Regiment crossed behind the III/78th Infantry and suffered 600 killed out of 1,300 men trying to cross the river. The 80th Infantry Regiment crossed with the 78th Infantry Regiment, and its reported casualties were substantial.

At 0200hrs the 237th Infantry Regiment crossed the river, led by the I/237th Infantry. The regiment advanced on a 100yd front against positions held by E/128th Infantry. This attack was supported by at least two heavy machine guns and several regimental and divisional 75mm mountain guns. E/128th Infantry's outnumbered men, supported by 81mm mortars and 105mm howitzers, inflicted heavy losses on the 237th Infantry Regiment, including the destruction of the 4/237th Infantry. The sacrifice of that company allowed the rest of the I/237th Infantry to cross the river and rush E/128th Infantry's weapon positions and command posts. Fighting died down around 0400hrs as both sides paused to take stock. E/128th Infantry had ten dead and 20 wounded. With the company's ammunition depleted and bands of Japanese all around, the scattered survivors made their way in small groups to join neighboring American units.

The Japanese attack drove E/128th Infantry from its positions and opened a 1,300yd gap in the PCF's line. This success resulted in heavy Japanese losses, however, and both disorganized and exhausted the three attacking regiments. The 78th and 80th Infantry regiments paused to reorganize and advance southwest to eliminate the southern units of the PCF – the 3/127th Infantry and the 112th Cavalry Regiment, both commanded by Cunningham.

The rest of the PCF experienced little or no fighting during the night of July 10/11. During the morning of July 11, Martin ordered the PCF



back to its second-line position, about 4,800yd west along a river named “X-ray” by the Americans. The Japanese did not pursue the Americans’ retreat, although patrols clashed in the jungle. By the evening of July 11, organized American forces were back to the “X-ray” line. Small groups of the battered 2/128th Infantry hid in the jungle and tried to make their way to friendly lines. This withdrawal of the covering force did not meet with approval from XI Corps or higher command.

On July 12, XI Corps received orders to drive the Japanese back east of the river. Gill was placed in command of the PCF, which was reinforced with the 124th Infantry Regiment. The PCF was organized into North Force (the 124th Infantry Regiment, the 1/128th Infantry, and the 2/128th Infantry) and South Force (the 112th Cavalry RCT and the 3/127th Infantry) to control the counterattack. South Force was led by Cunningham. The US counterattack started at 0800hrs on July 13, as the 112th Cavalry Regiment, led by an advance-guard platoon from B/112th Cavalry, moved east.

Around 1100hrs, B/112th Cavalry, having advanced some 2,100yd, encountered a company-sized force of the 20th Division. A firefight broke out and the 1/112th Cavalry deployed for action with C/112th Cavalry to the north, B/112th Cavalry in the center, and A/112th Cavalry to the south. Although dense vegetation limited sight to a few yards, artillery fire was called in on the suspected Japanese positions and at 1400hrs the 1/112th Cavalry charged across a stream. The Japanese had withdrawn earlier, however, and the 112th Cavalry Regiment continued its advance, reaching Afua by 1530hrs and reoccupying its positions along the Driniumor.

To the north the cavalrymen could hear fighting between North Force and the 41st Division. Unknown to the Americans, the 20th Division’s battered 78th and 80th Infantry regiments were in South Force’s rear to the northwest of Afua. South Force spent July 14–16 improving its positions, sending units northward to contact North Force, thereby closing the gap in the PCF’s line, and patrolling to locate the enemy. Many US patrols encountered and engaged Japanese in small-scale firefights. With small groups of Japanese attacking the supply trails, South Force was primarily supplied by airdrops from C-47 Skytrain transports.

With the PCF now positioned along the Driniumor from Afua to the coast, the 18th Army was split across the river. The 18th Army issued the following in new orders on July 16:

ABOVE LEFT

A 155mm M1918 howitzer firing. These were French-designed World War I weapons that had been upgraded before the Japanese attack on Pearl Harbor. They were to be replaced by the new 155mm M1 howitzer. The US Army had over 2,000 M1918s, which fired a 100lb shell up to 7 miles, and used many in the Pacific theater until the M1 became available. (US Army)

ABOVE RIGHT

The 105mm M2A1 howitzer was the standard American direct-support artillery piece in World War II. Production ran from 1941 to 1953, with over 10,000 produced. American doctrine called for at least one 12-gun artillery battalion to support each infantry regiment. The M2A1’s HE round fired a 33lb projectile up to 7 miles and outclassed the 75mm artillery that the IJA used on New Guinea. (US Marine Corps)

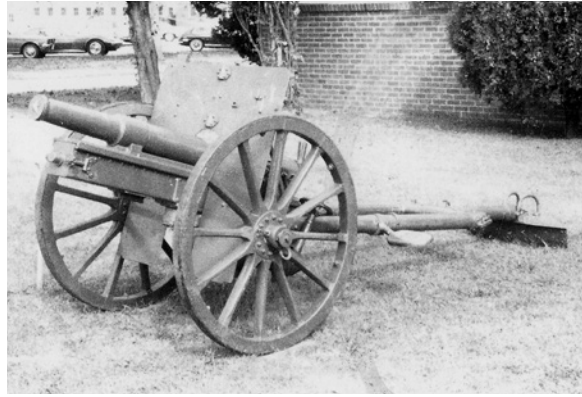
- a. On compilation of the various information, the enemy on the left bank of the Driniumor River is at least four or five battalions strong and seems to be planning a strong resistance. This is a golden opportunity for us to maneuver the enemy into a position for us to defeat. Our two divisions are continuing the attack but no decisive results have yet been obtained ...
 - d. The 20th Division will suspend all preparations for the main attack and will annihilate the present enemy which is entrenched ... and Afua with full strength.
- (Quoted in First Demobilization Bureau 1948: III.118)

The 18th Army had decided that capturing Aitape was beyond its capabilities; therefore it would try to kill as many Americans as possible.

The 78th and 80th Infantry regiments were placed under Major General Miyake Sadahiko, the 20th Division's infantry-group commander. Designated Miyake Force, this command was ordered to capture Afua and used July 17 and most of July 18 to prepare its attack. Just before dusk on July 18, Miyake Force's III/78th Infantry and II/80th Infantry attacked Afua from the south and west in a skirmish line, the Japanese firing as they emerged from the jungle. They were opposed by A/112th Cavalry. US artillery fire was quickly called in but, after two hours of fighting, the cavalymen were pushed out of their positions and retreated with 16 wounded about 250yd northeast. A field-telephone wire was followed to reach the safety of friendly forces. Two troopers had been killed in the fighting. B/112th Cavalry, facing east, quickly adjusted its positions so that one of its rifle platoons covered its southern flank and rear.

During the early morning of July 19, a composite force of three rifle platoons – two from the 1/112th Cavalry and one from the 3/127th Infantry – counterattacked and reoccupied A/112th Cavalry's former position. Here the Japanese quickly retreated, offering little opposition. During the early afternoon of July 19, Japanese units began to move against A/112th Cavalry's position from the north, northwest, west, and southwest. The 1/112th Cavalry called in artillery fire on the enemy. After this barrage, A/112th Cavalry attacked, driving off a company-sized body of Japanese and advancing 600yd southwest of its original positions. SWPA's Intelligence reported the Afua situation:

Identifications of the 78th and 80th Regiments, 20th Division, confirms previous evidence relative to the presence of elements of this division in the area south of our Driniumor River positions. The report of slight enemy pressure against the rear of the 112th Cavalry during 19 July, when coupled with 1) attack against one cavalry troop on the night of 18 July, 2) contact with an estimated two enemy companies 500 yards south of Afua on 19 June, 3) enemy movements, reported as large numbers, around our south flank south of Afua on 18 July, and 4) identification of elements of the 78th and 80th Regiments [in the] vicinity of Afua, constitutes a strong indication to an attack by the bulk of the 20th Division against our south flank in the vicinity of Afua–Akanai Creek with the axis of the attack presumably to the north, north west and/or along the Afua–Palauru track. It is conceivable that by infiltration tactics during the last week, the enemy has concentrated a sizable attack force south of Afua. (SWPA G2 Summary 20/21 July 1944)



The 78th Infantry and 80th Infantry regiments had not infiltrated the PCF's lines during the previous week, however, but had crossed the Driniumor during the attack on the night of July 10/11. American intelligence officers did not know that the attack and subsequent encounters had reduced the strength of Miyake Force's two infantry regiments to just a few hundred men. Still believing that martial spirit would prevail over materiel superiority, the 18th Army reinforced Miyake Force with the 79th Infantry Regiment (700 men) and a single 75mm mountain gun and ordered it to annihilate the Americans around Afua.

C/112th Cavalry had taken over the defense of South Force's southern flank on July 21 before the Japanese attacked from the south and southwest. At 1645hrs the 79th Infantry Regiment's single 75mm mountain gun fired its eight rounds into the Americans, wounding the commanders of C/112th Cavalry (Lieutenant Frank C. Fyke) and the 1/112th Cavalry (Major Harry E. Werner). The advancing Japanese infantry seem to have expected no resistance at Afua and walked right up to the Americans' positions. Firing quickly broke out and the Japanese separated C/112th Cavalry from its neighbor, B/112th Cavalry. Survivors of the 78th and 80th Infantry regiments now attacked from the northwest and drove some men of I/127th Infantry into C/112th Cavalry's position. Artillery fire was called in and the attack broke down under a hail of falling shells, but the Japanese action had left C/112th Cavalry isolated. The attacking Japanese may have numbered around 1,000 against an estimated 100 Americans.

During July 22–24, South Force attacked to rescue C/112th Infantry. Fighting was conducted at close range as understrength squads encountered each other in the dense jungle. During one of these fights, on July 23, an A/112th Cavalry platoon leader, 2d Lieutenant George W.G. Boyce, Jr., sacrificed his life when he threw himself on a Japanese hand grenade that landed among his men. Boyce was posthumously awarded the Medal of Honor for his actions. On July 25 C/112th Cavalry was able to evacuate its position and rejoin the 112th Cavalry Regiment by 1000hrs. South Force was reinforced with the entire 127th Infantry Regiment during this time. Cunningham reorganized his force, shortened his perimeter, and patrolled while preparing South Force for its part in the PCF's counteroffensive.

The 18th Army now decided to make an all-out attack against South Force with both divisions. The 41st Division's positions near the coast were left to

ABOVE LEFT

An IJA infantry regiment's gun company fielded six 75mm Type 41 regimental mountain guns. The Type 41 had been the standard mountain artillery (pack) piece from 1908 until replaced by the 75mm Type 94 mountain gun in 1934. The Type 41 could be broken down into separate loads weighing about 200lb each. It fired HE rounds weighing 9.9–13.24lb out to a range of 7,680yd. (US Marine Corps)

ABOVE RIGHT

The IJA's Type 94 mountain gun was the divisional artillery piece used on New Guinea. Before moving to New Guinea, the IJA's artillery regiments exchanged their towed 75mm field guns for the mountain guns. The Type 94, when broken down, could be carried by six pack horses or 18 men. To provide additional manpower to porter guns and ammunition, the artillery batteries on New Guinea were reduced from four to three guns each. The Type 94 had a range of 5 miles when firing 13.2lb HE rounds. (US Marine Corps)





Ambush at Afua, July 21, 1944



American view: Around 1650hrs, in twilight conditions, the Japanese 79th Infantry Regiment attacked Afua. Poor Japanese reconnaissance resulted in a group of attackers walking right up to C/112th Cavalry's position. Here, the American cavalymen are shooting from positions dug during the day in a small clearing. A two-man M1919A4 Browning machine-gun team is

firing down the track. On both sides of the machine-gun team, M1-armed cavalymen in foxholes are firing at the enemy. In the foreground, the NCO directing the defense holds his Thompson submachine gun, ready to engage any Japanese who survives the fusillade and breaks through the perimeter.



Japanese view: Elements of the 79th Infantry Regiment are moving in column, intending to launch a night bayonet attack, when they run into an ambush. The point man is hit by the initial burst from the M1919A4 machine gun, knocking him backwards; the two infantrymen following him are also hit in the first second or two. The third man behind the point reacts by rushing toward the bush on his right. The fourth man in line, slower to

react, is also hit by machine-gun fire. The Type 99 light-machine-gun team starts to move into the jungle to set up a position to return fire. The third man in the gun team and a rifleman stand on the trail in shock. These last two men are support personnel, sent forward as improvised infantry replacements. Surprised by the Americans, the Japanese attack will fail and they will retreat.

the I/239th Infantry and various transport and service troops. The Japanese attack was scheduled to commence in the evening of July 30, but movement delays saw it postponed to August 1. The attackers included the 20th Division (with the 66th Infantry and 237th Infantry regiments attached) with some 2,000 men and the 41st Division (minus the 237th Infantry Regiment and the I/239th Infantry) with about 1,750 men. These Japanese troops were malnourished, sick, and lacking weapons and ammunition. Their target was the 1/112th Cavalry, which anchored the American line at Hill 80 (or Sagi). This squadron held the river front facing east and positions facing west. Troops B, A, and C were deployed north to south. Thick vegetation prevented the cavalymen from clearing fields of fire to their south and west.

At 0620hrs on August 1, the remnants of the III/78th Infantry and I/238th Infantry attacked C/112th Cavalry in massed waves on a 75yd front. These attackers were cut down by American fire from rifles, automatic weapons, mortars, and the ubiquitous 105mm howitzers. A few Japanese reached C/112th Cavalry's firing positions only to be killed at point-blank range. With their officers dead, the few Japanese survivors fled into the jungle, ending the fight at 0800hrs. They left 180 dead in front of C/112th Cavalry's position while the troop lost five dead and six wounded. The 112th Cavalry Regiment's front quieted down and patrols were sent out that reported minor enemy contacts.

The next attack on the 1/112th Cavalry occurred at 1945hrs on August 2. The squadron held a strong line with automatic weapons positioned 25yd apart or closer. The attackers of the 41st Division's 238th Infantry Regiment and II/239th Infantry charged in tightly packed formation, relying on their mass to demoralize the Americans. Instead they were met with fire from rifles, automatic weapons, mortars, and artillery. The Japanese survivors were regrouped by their officers and sent charging again. Several hours later the attacks ceased, leaving over 100 Japanese bodies strewn in front of the 1/112th Cavalry, which suffered only four troopers lightly wounded.

The 18th Army's last attack on the 112th Cavalry Regiment was made at 0615hrs on August 4. Once again, the ravaged 41st Division charged into the defensive fires of the 1/112th Cavalry and once again the Japanese were stopped. After two hours, another 185 Japanese bodies were counted by the cavalymen. In a last grim manifestation of Japanese martial ardor, 16 of their wounded committed suicide in front of the squadron with hand grenades.

On August 10, the 112th Cavalry Regiment was pulled out of the PCF lines and ordered to the main Aitape perimeter. There the regiment was to rest and refit for its next assignment, which would be on Leyte in the Central Philippines.

On July 30, 1944, while the Driniumor River fighting was underway, American forces landed at Sansapor on the western tip of New Guinea. Now, besides the Japanese 18th Army around Wewak, the survivors of the 35th Division, most of the 2nd Sea Mobile Brigade, and two provisional infantry brigades formed from miscellaneous Japanese troops were isolated on New Guinea by the Allies. The Japanese troops were unable to mount a counteroffensive. (80-G-255406 courtesy of the Naval History and Heritage Command)



Analysis

The events at Buna showed that warfare on New Guinea was as much about logistics and transport as it was about fighting. Insufficient transport by sea and air initially forced the Americans, and their Australian allies, to rely on light infantry weapons to attack well-fortified positions. Many of the infantry's organic heavy weapons were left behind when units went forward because of transportation shortages. The 32d Infantry Division was handicapped by the lack of its divisional artillery, which was critical to the US Army's doctrine of combined arms. Unfounded beliefs that air bombardment could replace artillery were proven false shortly after the attacks began against the Japanese defenses at Buna. The Americans learned that the IJA was a very tough and determined opponent; on the defense, Japanese soldiers would have to be literally dug out of their positions.

The IJA rationalized its loss at Buna, and the larger failure to capture Port Moresby, as being the result of the American offensive on Guadalcanal in the Solomon Islands. The IJA's concentration of forces on Guadalcanal required canceling the advance on Port Moresby. Japanese troops on New Guinea and the few reinforcements were ordered to fight a holding action. Little if anything was learned from the fighting at Buna, however. The uneven performance of American infantry was considered as proof of the superiority of the IJA's martial spirit. Sacrificing soldiers' lives in hopeless fights was glorified and no efforts were made to develop and use alternative tactics, techniques, and procedures. In the end, the Japanese troops at Buna and neighboring locations were doomed by their inability to resupply and reinforce. Allied air superiority prevented the IJN from sending transport ships to Buna. Resupply by air was prevented by Allied fighters operating from nearby airfields at Dobodura. Eventually, starvation and disease sapped the fighting efficiency of the defenders and they were unable to defeat final American and Australian attacks that employed tanks. The IJA could have learned that operating on a logistical shoestring against the growing power of



the Allies was a recipe for disaster; instead, they deluded themselves that in the next battle martial spirit would bring victory.

On Biak, American forces encountered the first sign of a change in Japanese tactics. Acknowledging the massive firepower the Americans could now bring to any island in 1944, the Japanese recognized their forces' inability to defeat an amphibious assault. Now the Japanese would seek to prolong their defense and cause American troops the maximum number of casualties. Similar to their experience on Buna, the Americans literally had to dig the Japanese defenders out of their positions. The Japanese use of caves on Biak complicated the Americans' attacks because these provided a network of tunnels that allowed troops and weapons to move to and from different firing positions without being observed.

The Americans quickly improvised techniques to deal with cave defenses. Infantry/tank teams cleared opposition from around the entrances. Flamethrowers were used to try to burn out the enemy, but it was quickly seen that the entrances prevented the jets of flame from effectively dispersing within the caves themselves. Finally, engineers brought in hundreds of pounds of high explosives, which were detonated within the entrances. As their cave positions fell, the Japanese commander desperately resorted to suicidal charges and then committed ritual suicide. Lessons learned from this cave warfare were soon distributed to both US Army and US Marine Corps forces across the Pacific where the Japanese soon started using elaborate natural and manmade cave/tunnel complexes on Peleliu, Iwo Jima, Okinawa, and islands in the Philippines. The lesson of the fighting on Biak for the IJA was that while stubborn defense to the death inflicted heavy casualties, ultimately it could not stop the Americans.

At Aitape and the Driniumor River, American forces were defending against an all-out attack by the IJA's 18th Army. A year and a half after Buna, the Americans had absorbed the lesson learned; the employment of large numbers of engineer and service troops, supported by sea and air transport, ensured that the combat forces were well supplied. Infantry regiments of the

These Japanese Type 95 light tanks have been knocked out by American M4A1 medium tanks of the 603d Medium Tank Company on the coast of the island of Biak. Had the IJA absorbed the lessons of Nomonhan in the summer and fall of 1939, it would have learned that a reliance on martial spirit and a bayonet cult was the path to suicidal slaughter and defeat at the hands of a modern industrial-era army. The IJA could not accept the lessons of Nomonhan before going to war against the United States, however, for to have done so would have shaken both the IJA and the Empire of Japan to the core. (© Hulton-Deutsch Collection/CORBIS/Corbis via Getty Images)

32d and 43d Infantry divisions and the dismounted 112th Cavalry Regiment, all from the US Army National Guard, were now experienced veterans. Field artillery – eventually eight battalions of 105mm and two of 155mm howitzers – provided plentiful fire support. Ammunition for all arms was plentiful. Antimalarial drugs were used and preventive procedures were rigorously enforced to reduce the ravages of tropical disease. By contrast, the Japanese 18th Army was isolated and cut off from resupply. Only an occasional IJN submarine could slip in bringing limited amounts of supplies. The 18th Army was nearly out of food and medicines and its men were suffering the debilitating effects of tropical diseases and malnutrition. The 18th Army was forced to assign soldiers, including a portion of its greatly reduced infantry, to porter duty in order to move precious supplies and equipment to the Aitape area. The Japanese could only bring small numbers of 70mm and 75mm guns to the battlefield, however, and these guns had few shells available. Infantry battalions were understrength by 60 percent or more and lacked many of their crew-served weapons. Heavy losses had been incurred in earlier battles against Australian forces, and again during inland retreats that bypassed Allied forces along the coast.

Owing to the wide frontages covered by American defenders along the Driniumor River, Japanese infantry charges were able to break through. These attackers suffered heavy casualties, however. One infantry regiment, starting with 1,200 men, lost 600. American artillery fire accounted for most of these casualties and destroyed many of the attackers' heavy machine guns and artillery pieces. American forces quickly restored the line along the Driniumor River and repulsed increasingly desperate Japanese attacks. Throughout the fighting, American heavy weapons and artillery dominated the battlefield.

The battle along the Driniumor River pitted an army organized, equipped, and trained to use all the resources of the mid-20th century against one that believed the spirit of the attack would conquer technology. In the view of the US Army, victory validated its doctrine. Nevertheless, some American commanders considered that their infantry was not showing sufficient aggressiveness when patrolling and moving through the jungle. This merely reflected the fact that American infantry was assigned those men who were left after filling the ranks of more technical arms such as the USAAF, armor, artillery, and communications. Also, being relatively few in number, the riflemen did not see the need to be particularly aggressive. Knowing that they were a covering force with a main line of resistance to their rear did not engender a sense of overriding importance to holding the Driniumor River line. Yet despite concerns about their apparent timidity, Guardsmen and draftees on the front line fought and won the battle.

Even if the Japanese had gotten a force in position to attack the Aitape main defensive perimeter, they would have been up against the same artillery, fresh infantry, and engineers manning well-constructed defenses. One fact often overlooked by historians is that US Army combat-engineer battalions were copiously supplied with machine guns and other weapons. Indeed, some American officers felt that an engineer battalion had more firepower than an infantry battalion. Japanese bayonet charges against the Aitape main defensive perimeter would have been cut down *en masse* by these defenders.

Aftermath

In September 1944, American forces completed a series of amphibious operations along the northern coast of New Guinea. The last of these operations secured airfields around Sansapor on the western tip of the island. Since January 1944, the American and Australian forces had moved their front line on New Guinea forward by 1,000 miles, leaving the large Japanese force at Wewak 800 miles behind. This rapid advance was possible because Allied air and naval power had neutralized Japan's air and naval forces on and around New Guinea, which allowed the Allied forces to select lightly defended objectives for amphibious landings. Once ashore, American and Australian engineers quickly built airfields, ports, and bases to support further advances. These



Few Japanese were captured during the war on New Guinea. Here, Australian soldiers are distributing canned food to prisoners captured near Dobodura in Papua New Guinea during February 1943. The IJA did not expect any soldier would let himself be taken prisoner, therefore there was no training on how to behave if captured. The Allies soon discovered that freshly captured Japanese would freely answer interrogators' questions. (Mondadori via Getty Images)

operations placed MacArthur's forces just over 900 miles from Leyte in the Central Philippines, where, on October 17, the Sixth US Army began landings.

Seven US Army infantry divisions saw some level of combat on New Guinea: the regular 6th and 24th; the US Army National Guard's 31st, 32d, 41st, and 43d; and elements of the 93d (composed of African-American personnel). Three separate regiments also participated in combat there: the 503d PIR, 112th Cavalry, and 158th Infantry; the last two were also US Army National Guard formations. All of these units went on to participate in the liberation of the Philippines, their prior experience of fighting the Japanese proving invaluable during the liberation.

After the Aitape–Driniumor River battles, the 32d Infantry Division's 126th Infantry Regiment was temporarily detached and landed on Morotai Island, northernmost of the Maluku Islands and 330 miles northwest of New Guinea, on September 16, 1944. The regiment subsequently returned to the 32d Infantry Division concentrated at Hollandia. The 32d Infantry Division was then sent to the island of Leyte in the Central Philippines, arriving on November 14. After fighting on Leyte, the division shipped out to Luzon Island in the Northern Philippines, assisted in liberating Manila, and then fought the Japanese in northern Luzon Island until the end of the war. After participating in the occupation of Japan, the division was inactivated on February 28, 1946. The 32d Infantry Division was in combat for 654 days, making it the US Army infantry division with the most days of combat in World War II.

The 112th Cavalry Regiment's post-Driniumor River combat also included Leyte, Luzon Island, and the occupation of Japan. The regiment was reorganized, with each of its rifle squadrons receiving heavy weapons and additional headquarters and communications personnel. The regiment shared the same organization as the four regular cavalry regiments (the 5th, 7th, 8th, and 12th) in the 1st Cavalry Division. This proved useful when the regiment was attached to the 1st Cavalry Division on Leyte, when it became for all intents and purposes a fifth regiment in that division for the rest of the war. Scheduled to participate in the invasion of Japan, all five dismounted cavalry regiments were restructured as two-battalion infantry regiments, but retained cavalry designations of squadrons and troops. The 112th Cavalry Regiment was inactivated in Japan on January 27, 1946.

The 41st Infantry Division remained on Biak until late January–early February 1945, when it deployed to the Philippines. The division's 186th RCT landed on Palawan Island, the most westerly of the Philippine islands, on February 28, 1945. The remainder of the division invaded Zamboanga City on Mindanao Island on March 10, 1945. The 186th RCT rejoined the 41st Infantry Division on Mindanao Island and continued operations against the Japanese. Elements of the division cleared the Sulu Islands southwest of Mindanao Island. The 41st Infantry Division helped occupy Japan and was inactivated at Sure-Giro, Japan, on December 31, 1945.

Japanese forces on New Guinea suffered defeat or isolation by September 1944. In early 1943, Buna survivors of the 144th Infantry Regiment went to Burma, where the regiment was rebuilt and rejoined its parent 55th Division, spending the remainder of the war fighting the British–Indian Fourteenth Army. The remnants of the III/229th Infantry were evacuated to Rabaul where it too was rebuilt. The battalion fought with the rest of its

regiment on New Georgia (Solomon Islands) in summer 1943. Again, this battalion was evacuated to Rabaul and spent the rest of the war as part of the large Japanese garrison awaiting an attack that never came.

After calling off its attack at Aitape in late July 1944, the 18th Army retreated east toward Wewak. Its infantry and artillery suffered very high casualties along the Driniumor River; the 20th Division lost over 2,500 out of 4,000 infantry and artillerymen it attacked with and losses of the 41st Division were as bad. The 18th Army spent the remainder of the war trying to survive in the jungles around Wewak. Fighting was limited to conducting a guerrilla war against the Australians. At war's end, the 18th Army surrendered to Australian forces. This army then totaled around 13,000 men, these being the survivors of approximately 100,000 men sent to eastern New Guinea. The 20th Division surrendered 1,711 men with 12 light and 16 heavy machine guns and three artillery pieces; the 41st Division counted 1,147 men with 12 light and four heavy machine guns; and the 51st Division totaled 4,319 men with 26 light and 14 heavy machine guns and one cannon. The men of the Biak Detachment's 222nd Infantry Regiment, II/221st Infantry, and II/219th Infantry were either dead, in small scattered parties on Biak, or among the few who escaped to other Japanese-held islands near New Guinea. None of them were combat-effective troops when Japan surrendered. New Guinea was indeed the graveyard for IJA units sent there.

The IJA was disbanded after Japan formally surrendered on September 2, 1945, and the units that fought on New Guinea disappeared into the history books. For the US Army National Guard units the postwar era brought reorganization and some new roles. Today the 32d Infantry Division has been succeeded by the 32d Brigade Combat Team of the Wisconsin and Michigan National Guards. The 112th Cavalry Regiment is now represented by its 1st Squadron, which serves in the Texas National Guard's 72d Brigade Combat Team as mechanized cavalry. The 41st Infantry Division has evolved into the 41st Infantry Brigade of the Oregon National Guard, while the division's former 163d Infantry Regiment has been converted to the 163d Cavalry Regiment of the Montana National Guard.



These are 75mm M8 howitzer/assault guns, built on the M5 light tank chassis. A lesson learned by the Americans fighting in all theaters was that the infantry needed their own armor support that they knew, trained with, and trusted instead of relying on temporarily attached tank companies. To provide this, in late 1944 the US Army re-equipped infantry regiments' cannon companies with M8s in place of 105mm short-barreled towed howitzers. Eventually, postwar infantry divisions included an organic tank battalion and infantry regiments an organic tank company, which replaced regimental cannon and antitank companies. (© CORBIS/Corbis via Getty Images)

UNIT ORGANIZATIONS

American

Two “infantry” organizations used on New Guinea were the standard US Army infantry battalion and the dismounted cavalry squadron. Between Buna and Biak, few changes were made in the infantry-battalion organization. The battalion included three rifle companies, a heavy-weapons company, and a headquarters and headquarters company. The heavy-weapons company had 166 officers and men and eight .30-caliber heavy machine guns, one .50-caliber heavy machine gun, six 2.36in M1 rocket launchers (bazookas), and six 81mm mortars. A rifle company of 193 officers and men included a headquarters, three rifle platoons each of three 12-man rifle squads (each rifle squad had a BAR) and a five-man headquarters, and a weapons platoon with two .30-caliber light machine guns and two 60mm mortars.

The 112th Cavalry Regiment was smaller than an infantry regiment. Each of the regiment’s two cavalry squadrons consisted of a 20-man headquarters and three 167-man rifle troops organized into three rifle platoons each of three rifle squads. Cavalry rifle squads at Aitape each had a BAR and usually two submachine guns. The cavalry squadrons did not have the equivalent of an infantry battalion’s heavy-weapons company. Instead, each rifle troop relied on its own pair of 60mm mortars and four .30-caliber light machine guns. The regiment did have a heavy-weapons troop with eight .30-caliber heavy machine guns and four 81mm mortars at Aitape, but the weapons were initially left behind when the regiment moved into the jungle. Later, at least two of the 81mm mortars were parachuted to the regiment.



Japanese

The Japanese used a number of infantry battalion organizations during the war, two of which predominated among units on New Guinea. Before entering combat on the island the IJA frequently reduced its units’ sizes, however, to account for the tropical environment and provide men for logistics (porter) duty. The units encountered by American forces in the three actions detailed in this book varied greatly.

The III/229th Infantry at Buna consisted of four infantry companies. Each company had three platoons of four squads: three with a light machine gun each and one with three grenade dischargers. The companies averaged about 150 men each. The battalion included one machine-gun company with eight heavy machine guns and a battalion gun platoon with two 70mm Type 92 battalion guns. The battalion appears to have had around 800 men when dispatched to Buna.

At Aitape the depleted 18th Army attacked with weakened infantry battalions of 300–400 men; these maintained their paper structure of four rifle companies, a machine-gun company, and a battalion gun platoon. Each infantry battalion carried two or three heavy machine guns and one 70mm Type 92 battalion gun. Rifle companies ranged from 50 to 90 men with five or six light machine guns.

On Biak the 222nd Infantry Regiment had a new infantry battalion organization. These battalions each had three rifle companies, a mortar company, and a battalion artillery company. On paper, the rifle companies each had 197 men equipped with 12 light machine guns, two heavy machine guns, two 81mm mortars, and one 20mm antitank rifle. The mortar company was authorized 141 men and 12 81mm mortars. The battalion artillery company had 121 men with three 75mm regimental guns and two 37mm antitank guns.

A wrecked Japanese motorized barge and downed fighter aircraft illustrate the collapse of the Japanese positions on New Guinea and the Solomon Islands. Motorized barges were critical to the IJA to move troops and supplies in these regions. Entire sea-transportation regiments were in their force structure. The loss of air and sea superiority meant the Japanese forces were stranded. (NH 74780 courtesy of the Naval History and Heritage Command)

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are available, starting with two volumes in the official series Australia in the War of 1939–1945: Volume V, *South-West Pacific Area – First Year*, by Dudley McCarthy, and Volume VI, *The New Guinea Offensives*, by David Dexter. These can be found online at <https://www.awm.gov.au/collection/C1417305>

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INDEX

References to illustrations are shown in **bold**.
References to plates are shown in bold with
caption pages in brackets, e.g. 54–55, (56).

Adachi Hatazō, Lt. Gen. 43

Afua, fighting at 62, 63, 65, 66–67, 68–69,
(70)

Aitape, fighting for 7, 8, 9, 15, 27, 28, 31, 45,
59–60, 73–74, 77

Alamo Force (US) 6, 8, 9

antitank guns/rifles: (Jpn) 25, 25, 44; (US)
22

artillery pieces (Aus): 36; 3.7in 29, 35, 38, 40;
25-pdr 29, 40, 41

artillery pieces (Jpn) 15, 48, 49, 53, 65, 67,
77: 70mm 25, 28, 31, 56, 59, 64, 74;
75mm 25, 31, 46, 59, 63, 64, 67, 67, 74;
100mm/150mm 31

artillery pieces (US) 31, 35, 72: 75mm 77;
105mm 14, 22, 29, 52, 61, 64, 65, 71, 74;
155mm 14, 22, 52, 65, 65, 74

assault guns (US): M8 77

Australian Army forces 5, 6, 7, 8, 9, 29, 32, 33,
33, 34, 34, 35, 36, 37, 40, 41, 43, 44, 44,
45, 72, 74, 75, 75, 77

Barbey, Rear Adm. Daniel E. 47

Biak, fighting for 7, 8, 9, 15, 27, 28, 42,
45–50, 48, 49, 50, 51, 52–53, 53, 54–55,
(56), 56–58, 61, 73, 73, 76, 77

Biak Detachment (Jpn) 46–47, 48, 49, 52, 77
Blamey, Gen. Sir Thomas A. 6, 7

Buna, fighting for 5–6, 7, 8, 9, 12, 13, 15, 16,
17, 23, 28, 32–36, 37, 38–44, 38, 39, 42,
44, 72–73, 76

Buna Force (US) 42–43, 44

Cunningham, Brig. Gen. Julian W. 60, 61, 64,
65, 67

Doe, Brig. Gen., Jens A. 49

Driniumor River (the), fighting 59–62, 63,
64–67, 68–69, (70), 71, 73–74, 77

Eichelberger, Lt. Gen. Robert L. 36, 42, 43, 40,
42, 44, 49, 50, 52, 53, 56

Fuller, Maj. Gen. Horace H. 45, 47, 49

Gill, Maj. Gen. William H. 60, 65
grenade dischargers (Jpn) 25, 27, 50, 57

Hall, Maj. Gen. Charles P. 60, 61

Harding, Maj. Gen. Edwin F. 35, 36, 40, 41,
42, 44

Hiroshi Yamamoto, Col. 34, 44

Hollandia, fighting for 8, 9, 42, 45, 48, 59,
61, 76

Hurricane Task Force (US) 45, 47, 49, 50,
51, 53

Imperial Japanese Army

composition/elements of 14–15, 19

conscription/training 19–20

doctrine 20–21, 24–25

logistics/resupply 8, 30–31, 35, 46–47, 53,
59, 72–73, 74

martial spirit 7, 25, 58, 67, 71, 72, 73, 74

ritual suicide 7, 43, 57, 58, 71, 73

tactics 24–25, 72, 73, 74

Imperial Japanese Army forces

airdrome construction units: 17th 46; 107th
46, 53; 108th 46

antiaircraft artillery bns 34, 52, 53: 47th
34; 49th 46

armies: 2nd 8, 46; 17th 4; 18th 8, 9, 28,
30, 31, 33, 43, 45, 47, 59, 60, 61, 62, 64,
65–66, 67, 67, 71, 73, 74, 77

artillery forces 24, 30, 31, 52, 59, 77: bns
15, 46; btys 15, 31, 46, 67; regts 15,
34, 67

infantry bns 15, 24–25, 28, 31, 46, 74:
I/78th 62, 64; III/78th 62, 64, 66, 71;
II/80th 62, 66; II/219th 46, 50, 51,
57, 77; II/221st 46, 47, 51, 52, 53,
77; I/222nd 51, 52; III/222nd 47, 52;
III/229th 16, 17, 34, 35, 36, 37, 76–77;
I/237th 62, 64; I/238th 71; I/239th 62,
71; II/239th 15, 71

infantry dvns 14–15, 25, 27, 31, 46:
2nd/13th/19th 19; 20th 15, 59, 62, 64,
65, 66, 71, 77; 32nd 31; 35th 31, 46,
71; 36th 8, 15, 46; 37th 43; 38th 34;
41st 15, 59, 62, 63, 64, 65, 67, 71, 77;
42nd 19; 51st 15, 31, 59, 77; 55th 76
infantry regts 14–15, 24–25, 67: 4th 4; 41st
4, 15; 44th 34; 61st 59; 66th 62, 63,
71; 78th 62, 63, 64, 65, 66, 67; 79th 62,
63, 67, 68–69, (70); 80th 62, 63, 64, 65,
66, 67; 115th 31; 124th 4; 144th 4, 15,
34, 35, 36, 37, 76; 222nd 8, 15, 46, 77;
237th 62, 63, 64, 71; 238th 71

Imperial Japanese Navy units 4, 5, 14, 29–30,
31, 34–35, 46, 52, 71, 72

Kinkaid, Vice Adm. Thomas C. 6
Krueger, Lt. Gen. Walter 6, 6

Lae, fighting for 5, 6, 9, 31

Lehrabas, Col. Lloyd 35

MacArthur, Gen. Douglas 5, 6, 7, 35, 40, 76
machine-gun teams (US) 68–69, (70)

machine guns (Jpn) 39, 40, 41, 53: heavy 25,
25, 41, 64, 74, 77; light 19, 24, 25, 25, 50,
57, 68–69, (70), 77

machine guns (US) 38, 44: BAR 21, 23, 54–55,
(56); heavy 22, 23, 57; light 22, 23, 39, 57;
medium (US) 22

Martin, Brig. Gen. Clarence A. 42, 60, 64

Milne Bay, defense of 5, 6, 9

Miyake Force (Jpn) 66, 67

Miyake Sadahiko, Maj. Gen. 66

mortar bns/cos/crews: (Jpn) 15; (US) 41, 45

mortars (Jpn) 15, 28, 48, 56

mortars (US) 38, 41, 44, 64, 71: 4.2in 52;
4.5in 45; 60mm 22, 40, 41, 57; 81mm 22,
23, 39, 40, 41, 64

New Guinea Force (Aus/US) 6, 8, 9

Persecution Covering Force (US) 60–61, 62,
64–65, 67, 71

Persecution Task Force (US) 59–60, 61

Port Moresby, defence of 4, 5, 6, 8, 9, 32, 72

rifles (Jpn) 15, 39, 41, 50, 53, 57: Type 99 16,
17, 25, 68–69, (70)

rifles (US) 38, 64, 71: M1 Garand 12, 13, 18,
20, 23, 54–55, (56), 68–69, (70); M1903
13, 23

Royal Australian Air Force 5, 31, 61, 61

Royal Australian Navy 5, 61, 61

Sansapor, fighting for 9, 71, 74, 75

South Seas Detachment (Jpn) 5–6, 8, 32

Southwest Pacific Area naval force (US) 5, 7,
35, 40, 61, 66

Special Naval Landing Forces (Jpn) 34, 37,
40, 44

Struble, Rear Adm. Arthur D. 47

submachine guns (US): Thompson 39, 42,
54–55, (56), 68–69, (70)

submarines: (Jpn) 30, 74; (US) 31, 46

tank destroyers (US) 14: M10 23, 61

tanks (Aus) 72: M3 36, 44, 44

tanks (Jpn) 47: Type 95 25, 57, 73

tanks (US) 14, 22, 44, 72: M4A1 23, 25, 47,
50, 52, 53, 54–55, (56), 56, 57, 60, 73;
M5 77

Urbana Force 36, 37, 40, 42, 44

US Army

doctrine 20–23, 72

logistics/resupply 28–30, 32, 49, 61, 62,
65, 72, 73

National Guard forces 8, 10–11, 11, 14,
18–19, 26, 35, 60, 61, 74, 76, 77

tactics 39, 73–74

US Army forces

armies: Sixth 6–7, 47, 49, 76; Eighth 7, 42

artillery forces 14, 22–23, 41, 44, 45, 52,
62, 65, 65, 66, 67, 72, 74: antiaircraft
artillery 14, 45; field artillery 11, 22–23,
32, 45

cavalry regts: 5th/7th/8th/12th 76; 112th
14, 60, 61, 62, 63, 64, 66, 67, 71, 74,
76, 77

cavalry sqns 60, 61, 76: 1/112th 61, 62,
63, 65, 66, 67, 68–69, (70), 71; 2/112th
61, 62, 63

engineers 39, 49, 50, 53, 57, 58, 73, 74, 75;
bdes/bns 11, 29, 32, 58, 74; boat and
shore regts 45

infantry bns 14, 23, 27, 34, 35, 60, 74:
1/126th 35, 36, 37, 41, 43, 44; 2/126th
32, 36, 37, 40, 41, 42; 3/127 60, 61, 62,
63, 64, 65, 66, 67; 1/128th 12, 13, 36,
37, 38, 40, 41, 42–43, 44, 61, 63, 65;
2/128th 35, 36, 37, 40, 42, 61, 62, 63,
64, 65; 3/128th 36, 37, 38–39, 41, 42,
43, 44, 60; 1/162d 50, 51, 53, 54–55,
(56), 56–57; 2/162d 51; 3/163d 50, 51,
52, 53; 1–3/186th 50, 51, 52, 53

infantry dvns 5, 8, 11, 14, 22, 77: 6th 8,
76; 23d 11; 24th 76; 26–30th 10; 31st
14, 60, 76; 32d 8, 14, 19, 29, 32, 33, 35,
36, 37, 38, 39, 40, 41, 42, 44, 46, 60, 72,
74, 76, 77; 33d–40th 10; 41st 8, 14, 19,
45, 49, 50, 52, 58, 60, 76, 77; 42d 10,
43d 14, 60, 74; 44–45th 10; 77th 42;
93d 28, 76

infantry regts/RCTs 8, 10–12, 22, 25, 32,
65, 73–74, 76, 77: 34th 51, 52; 124th
60, 62, 63, 65; 126th 32, 33, 35, 43, 76;
127th 37, 44, 60, 70; 128th 32–33, 35,
41, 43, 60, 63; 132d 11; 158th 8, 14,
76; 162d 47, 48, 49, 50, 52, 53; 163d 8,
45, 52, 77; 186th 47, 48, 49, 50, 52, 53,
56, 57, 76

parachute infantry regts: 503d 6, 8, 76

regimental cannon cos 14, 22, 32, 41, 60,
61, 77: 126th 32

tank cos 45, 52, 77: 603d 47, 54–55, (56),
73

US Marine Corps forces 32, 48, 73

US Navy forces 4, 5, 6, 29, 29, 31, 47, 48, 49,
59, 60

USAAF operations 5, 18, 26, 31, 61, 74

Warren Force 36, 37, 40, 41, 42, 44

Wewak, Japanese forces at 6, 8, 9, 30, 45, 46,
47, 59, 75, 77

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Author's note

First, this work does not cover the fighting by the Australian soldiers in New Guinea because it profiles US Army National Guard units. Australia's contribution was great, and should not be forgotten. The author hopes that a future volume will address the subject of Australian forces on New Guinea. Second, when describing the action on Biak, the terms "West Caves" and "West Cave" are both used. The Americans used "Caves" while Japanese documents use "Cave." "Caves" is generally used except when quoting a translated Japanese document.

Editor's note

US Army battalions assigned to regiments are shown as, for example, "1/128th Infantry" (1st Battalion, 128th Infantry Regiment). The Japanese used Roman numerals to designate battalions organic to regiments; such battalions are shown as, for example, "II/239th Infantry." Japanese names are shown in the traditional Japanese manner with the surname or family name first, followed by the personal name.

Artist's note

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